PheeNet

IP PBX

User's Manual ***IPBX-011 / IPBX-011CF***

version: 1.0

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CH1. Overview

The PheeNet IPBX-011 / IPBX-011CF is the next generation all-in-one IP PBX system for small to medium enterprise. It is also designed to operate on a variety of VoIP applications, such as voice mail, auto-attendant, call transfer, call pick up and IP-based communications. With the tiny box, small to medium enterprise or homes can use it to access the Internet and to make VoIP phone calls.

Customers can select different suite and optional products to meet their request. To Integrate with VG-1440R can provide PSTN access function; IP Phone IPP-188 and VG-1404R can provide extensions. With flexible and full functionality, PheeNet IPBX-011 / IPBX-011CF can give a complete transition from traditional PABX to the new generation IP-PBX.

1.1 Specifications

- **Protocol**
  - SIP (Session Initiation Protocol)
- **Call Features**
  - Authentication
  - Automated Attendant
  - Call Transfer
  - Blind Transfer
  - Call Forward on Busy
  - Call Forward on No Answer
  - Call Forward Unconditional
  - Call Forward Unavailable
  - Call Hold/Retrieval (CPE based)
  - Call Routing
  - Call Waiting (CPE based)
  - Caller ID
  - CLIR (Caller Line Identification Restriction)
  - Do Not Disturb
  - Flexible Extension Logic
  - Music On Hold
  - Music On Transfer
  - Call Pickup
  - Call Park
  - Camp-On (Call Back on Busy)
  - Three-way Conference (IP Phone IPP-188)
  - Time and Date
  - Trunking (VG-1440R)

- VoIP Gateways (VG-1440R)
- Voice Mail to e-mail
- Voice Mail System (IPBX-011CF only)
- Call Detail Records
- Call Monitor

➢ **Codecs**

- G.711 (A-Law & μ-Law)
- G.729
- G723 Pass-Thru
- GSM

➢ **Technical Features**

- Subscriber NAT transversal
- Phone set record Greeting
- Management: Web Browser Management
- HTTP upgrade firmware and ring back tone file
- Export/Import configuration
- Network Interface: 1WAN 1LAN
- DTMF: in-band, RFC2833, SIP-Info
- Network: Support Fixed IP, DHCP, and PPPoE mode

➢ **Capacity**

- 100 register users
- 13 concurrent calls

➢ **Dimension**

- 17.5 x 12.5 x 3.2 cm

➢ **Product Info**

Order Information	
Model	Version
iPBX-011	Standard Version
iPBX-011CF	Voice Mail+1G Storage

1.2 Hardware Overview

1.2.1 Front Panel and LED Indication

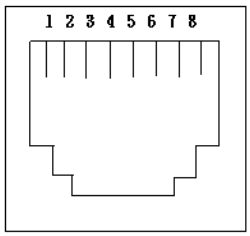
- **Power:** Light on when IPBX-011 / IPBX-011CF is powered on.
- **Status:** Light on when system is ready.
- **Alarm:** Light Flash when system is upgrading software, please do not unplug power when Alarm is flashing.
- **SIP Trunk:** Light on when IPBX-011 / IPBX-011CF successfully registered to all of the enabled SIP Trunks; Light flash when IPBX-011 / IPBX-011CF failed to register to one of the enabled SIP Trunks; light off when there is no SIP Trunk has enabled.
- **CDR:** IPBX-011 / IPBX-011CF can output Call Detail Records to external computer. User has to execute CDR program on computer, when IPBX-011 / IPBX-011CF is ready to connect with CDR server and output data, this indication will light on.

  Note:
  - CDR Function can only work in local area network. Please prepare the CDR server under LAN.
  - The CDR server is PheeNet proprietary, for more information about CDR, please contact with the sales person of PheeNet.

- **NET:** Display Network status. If WAN port of IPBX-011 / IPBX-011CF is under Fixed IP mode, LCD will light on. If WAN port is under DHCP or PPPoE mode, and IPBX-011 / IPBX-011CF succeeds in getting IP, LED will be flashing. If WAN port is under DHCP or PPPoE mode, and IPBX-011 / IPBX-011CF fails to get IP, LED will light off.
- **WAN**
  - **LINK/ACT:** Light on when WAN port is connected to network. Flash when data is transmitting or receiving.
  - **10/100:** Light on when network rate is 100 Mb/s, and light off when network rate is 10 Mb/s.
- **LAN**
  - **LINK/ACT:** Light on when LAN port is connected to network. Flash when data is transmitting or receiving.
  - **10/100:** Light on when network rate is 100 Mb/s, and light off when network rate is 10 Mb/s.

1.2.2 Back Panel

- **Reset:** Network and Login information will return to default values.
- **LAN/WAN:** RJ-45 socket, complied with Ethernet 10/100base-T.
  The pin-out is as following:



PIN 1, 2: Transmit
PIN 3, 6: Receive

- **12V DC:** Input AC 100V~240V;output DC12V

CH2. Start to configure IPBX-011 / IPBX-011CF

2.1 Step 1

Connect **LAN** port of IPBX-011 / IPBX-011CF with PC via crossover cable or connect with Switch/ Hub via straight through cable.

2.2 Step 2

Prepare one computer, and change the IP address to be **192.168.123.12x with subnet mask 255.255.255.0**.

2.3 Step 3

Open browser and link to default LAN IP address of IPBX-011 / IPBX-011CF "**192.168.123.123**" with default port number **10087**, i.e. **http://192.168.123.123:10087**

2.4 Step 4

Login IPBX-011 / IPBX-011CF with default userID: "**root**", and **no password**. After login IPBX-011 / IPBX-011CF, user can start to configure basic and essential configurations.

2.5 Step 5: To configure basic and essential configurations

To make IPBX-011 / IPBX-011CF work have to set some basic and essential configurations, those include Network, Extension (FXS and IP Phone devices), and Trunk (FXO devices).

2.5.1 Network Configuration

Enter **Management→ Network** to configure WAN and LAN IP.

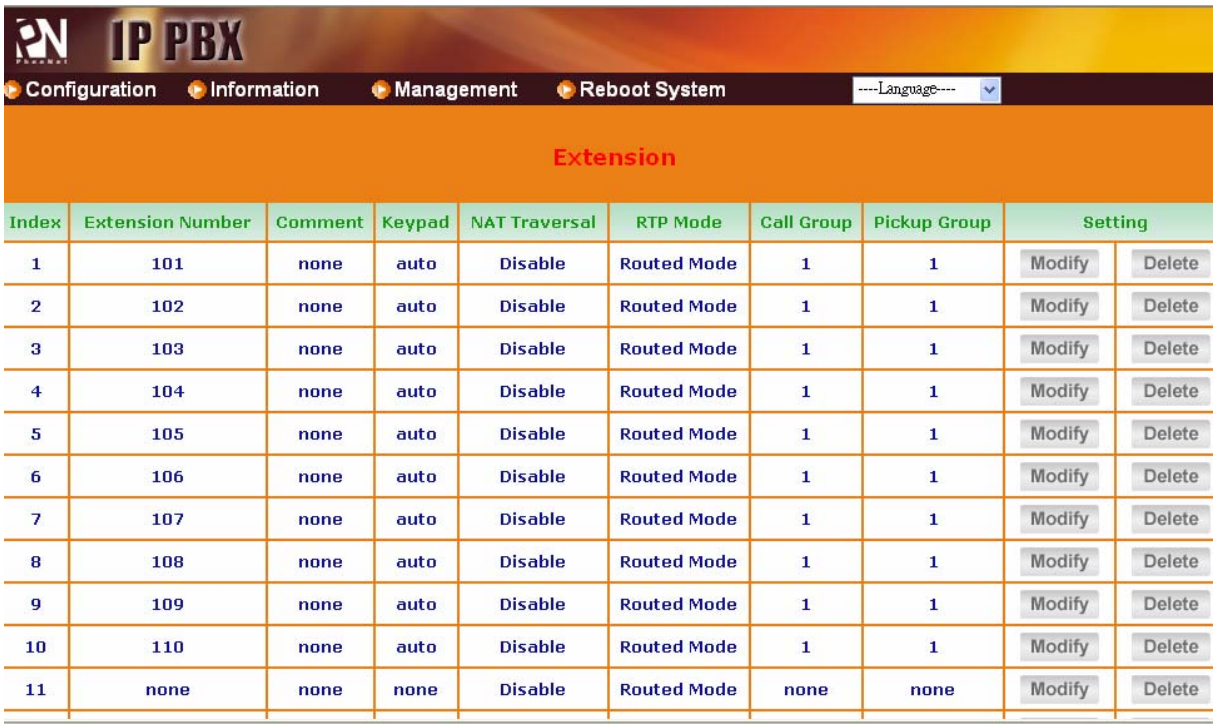
- WAN
  - Mode: Select IPBX-011 WAN port network mode to be Fixed IP, DHCP or PPPoE.
  - IP Address/NETMASK/GATEWAY: If user has set IPBX-011/IPBX-011CF to be fixed IP mode. User need to input IP address/Subnet Mask/ Default Gateway.
  - DNS: Input DNS address.
  - PPPoE ID: If user select PPPoE mode, here can input PPPoE account ID.
  - PPPoE PWD: If user select PPPoE mode, here can input PPPoE account password.
  - Mac: Mac address of IPBX-011 WAN port. The Mac address cannot be modified.
- LAN
  - IP Address: Input IP address for LAN port of IPBX-011 / IPBX-011CF.
  - NETMASK: Input Subnet Mask for LAN port of IPBX-011 / IPBX-011CF
  - Mac: Mac address of IPBX-011 LAN port. The Mac address cannot be modified.

Press Apply to save configuration, or press Cancel to quit configuration.

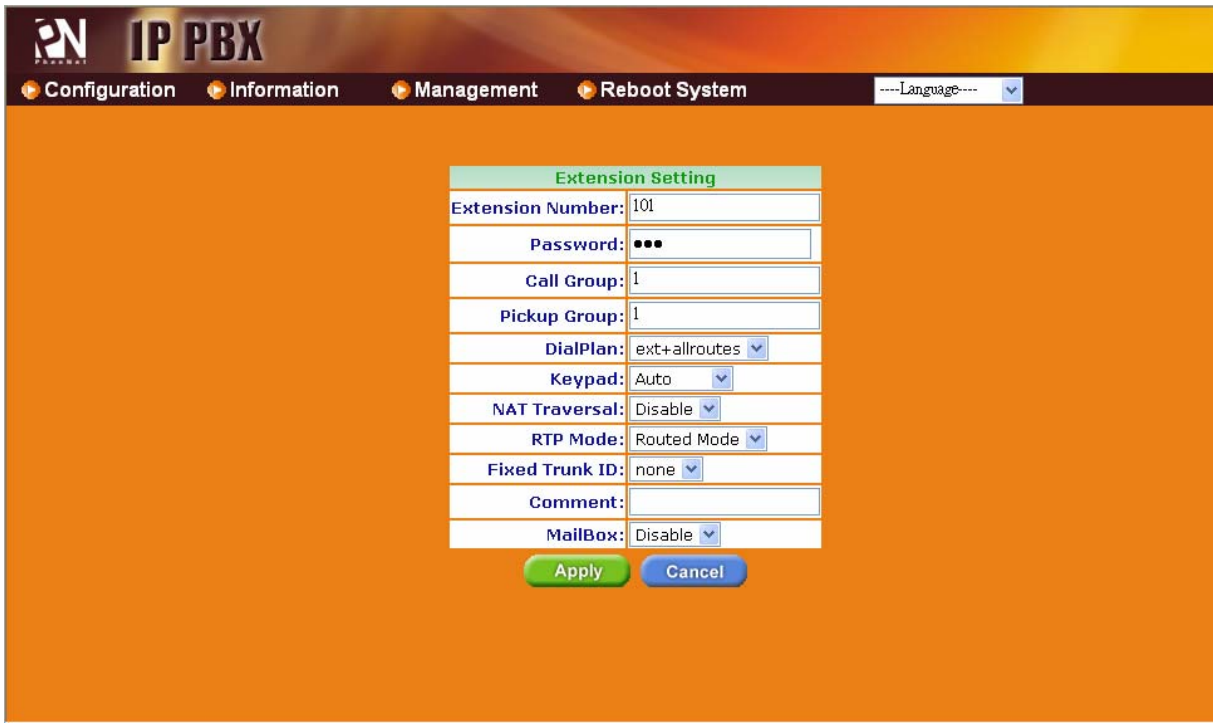
2.5.2 Extension Configuration

User has to set Extension account for other device to register on IPBX-011 / IPBX-011CF.

Enter **Configuration** → **Extension** to configure Extension data. On screen will show 100 sets Extension. User can press **Modify** to add new Extension or modify configured Extension data. Press **Delete** will delete the specified Extension.


IP PBX
Configuration
Information
Management
Reboot System
----Language----
Extension
Index
Extension Number
Comment
Keypad
NAT Traversal
RTP Mode
Call Group
Pickup Group
Setting
1 101 none auto Disable Routed Mode 1 1 Modify Delete
2 102 none auto Disable Routed Mode 1 1 Modify Delete
3 103 none auto Disable Routed Mode 1 1 Modify Delete
4 104 none auto Disable Routed Mode 1 1 Modify Delete
5 105 none auto Disable Routed Mode 1 1 Modify Delete
6 106 none auto Disable Routed Mode 1 1 Modify Delete
7 107 none auto Disable Routed Mode 1 1 Modify Delete
8 108 none auto Disable Routed Mode 1 1 Modify Delete
9 109 none auto Disable Routed Mode 1 1 Modify Delete
10 110 none auto Disable Routed Mode 1 1 Modify Delete
11 none none none Disable Routed Mode none none Modify Delete

After press Modify can input detail setting for Extension.



- **Extension Number:** Assign the number of Extension. This number is also the register

name for device.

- **Password:** Assign the register password for device to register on IPBX-011 / IPBX-011CF.
- **Call Group:** You can use the Call Group parameter to assign an Extension to one or more groups.
- **Pickup Group:** You can use the Pickup Group option in conjunction with this parameter to allow a ringing phone to be answered from another extension.

  Note:

  - The Pickup Group option is used to control which Call Groups a channel may pick up—a channel is given authority to answer another ringing channel if it is assigned to the same Pickup Group as the ringing channel's Call Group. By default, remote ringing extensions can be answered with ***8**.
  - You can define multiple Call Groups and Pickup Groups for one Extension by a "comma". For example, you can input "1,3,5" into Call Group or Pickup Group.

- **DialPlan:** Define the dialing plan for Extension. It specifies the location of the instruction used to control what the phone is allowed to do, and what to do with incoming calls for this extension. In this field, you can Choose 5 dial level for Extension, including [ext-only], [ext+R1], [ext+R12], [ext+R123], [ext+allroutes]. You can define an "Outgoing call" record, to a certain Route Level, as R1, R2…, etc. [ext-only] means this subscriber can only call to Extension. [ext+R1] means the subscriber with such DialPlan can call to Extension and Route Level with R1. [ext+R12] means the subscriber with such DialPlan can call to Extension and Route Level with R1 and R2. [ext+R123] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2 and R3. [ext+allroutes] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2, R3 and R4.

  Note:

  - For more information about Route Level, please refer to the user manual: **CH3.1.6.1 Outgoing Call Rule**.

- **Keypad:** User can select Keypad type to be RFC2833, In-band, SIP-Info and Auto. You can choose Auto to auto select the Keypad type. Choose RFC2833, Inband or SIP-Info here will force the Extension use RFC2833, Inband or SIP-Info only and the setting should be also match the Keypad setting of Extension device.

  Note:

  - Now IPBX-011CF could not support G729 with Inband Keypad type. If IPBX-011CF detect the caller or callee not support RFC2833 DTMF type. Then IPBX-011CF will force the Codec to G711 to make sure the DTMF detection is correctly.

- **NAT Traversal:** If the Extension device is behind a device performing NAT, such as firewall or router, and need to register to IPBX-011 / IPBX-011CF on public network, then user has to enable this function. Enable NAT Traversal to force IPBX-011 / IPBX-011CF to ignore the contact information for the Extension and use the address from which the packets are being received.
- **RTP Mode:** User can choose for two type of RTP mode, one is Routed Mode another is Direct Mode. The voice media will be routed "Peer-to-Peer" if two clients are both setting to Direct Mode. This way will improve the voice quality and reduce the performance wastage of the IPBX-011 / IPBX-011CF.

  Note:
  - If one peer set to Direct Mode but another peer set to Routed Mode, the result will become to Routed Mode.
  - Voice media will still go through the IPBX-011 / IPBX-011CF if the IPBX-011 / IPBX-011CF needs to detect DTMF.
  - If you enable the NAT Traversal function for Extension, the RTP mode will change to Routed Mode directly; this way will avoid the "one-way voice" or "no voice issue" of VoIP.
  - If the both peers are under different subnet, or one peer is under Public IP but another one is under Private IP, **we strongly suggest you to set the RTP mode to Routed Mode to avoid some unexpected voice problems.**

- **Fixed Trunk ID:** User can define a Fixed Trunk for a certain extension. When such extension makes an outgoing call via routing table, IPBX-011 / IPBX-011CF will check "Fixed Outgoing Call Rule" first. If "Fixed Outgoing Call Rule" is enabled, then IPBX-011 / IPBX-011CF will confirm the Fix Trunk ID for the calling party. That means the outbound call will be routed by Fixed Trunk ID, if you define the Fixed Trunk ID for the calling party and you also enable "Fixed Outgoing Call Rule".

  Note:
  - For more information about Fixed Outgoing Call Rule, please refer to the user manual: **CH3.1.6.1 Outgoing Call Rule.**

- **Comment:** You can input a 10 byte note for each extension here.
- **Mail Box:** User can select to disable or enable mail box function. If this function is enabled, user could input e-mail address for the Extension. When having voice mail of incoming call, system will send this voice mail to the specified e-mail address. You can also login the mail box system by dialing to *98, if you are using an IPBX-011CF.
- **E-Mail Address:** This field will appear when you enable Mail Box function and you can input the E-Mail Address here for voice mail to E-mail.
- **VM Login Password:** This field only exists if you are using an IPBX-011CF. IPBX-011CF has a built-in CF card to save voice mail. And user can login voice mail

system by dialing to *98, then input the mailbox number and password for voice mail. User can define the Voice Mail box login password here. Another way to login the voice mail system is dial to *98+extension number. For example, dial to *98101 can login EXT101's voice mail box, and caller can just input password to access voice mail.

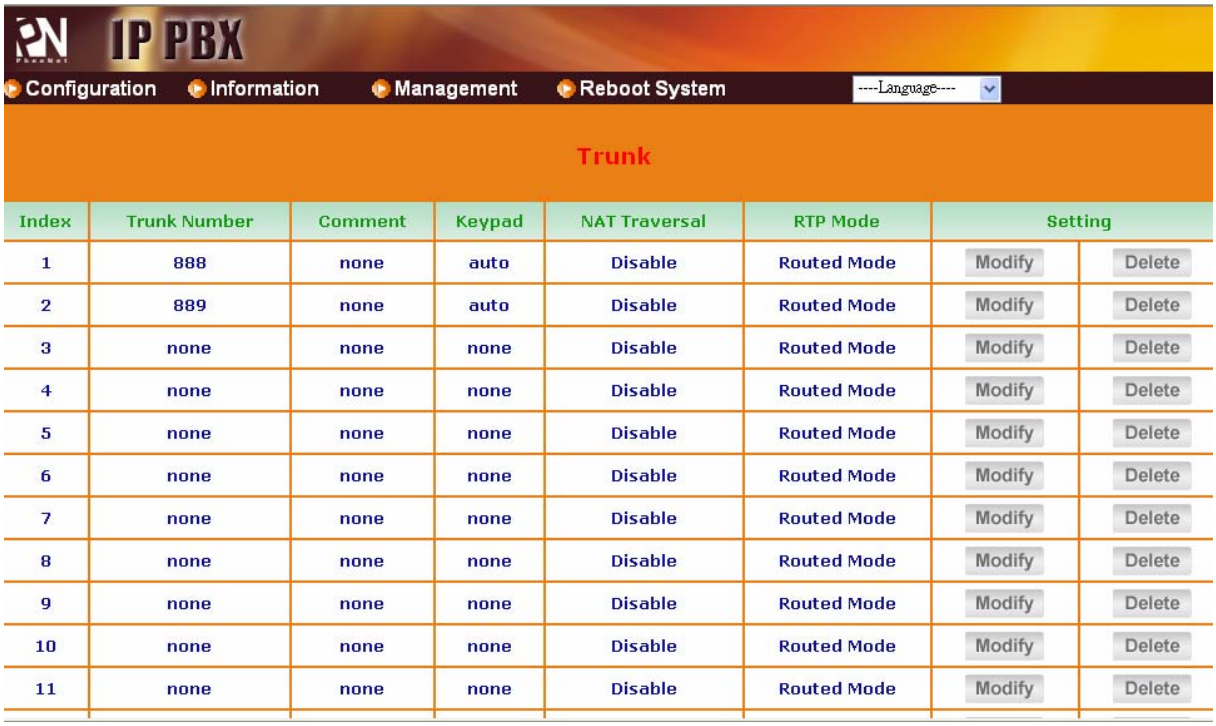
Note:

- **Please remember set the SMTP in the page of Management → SMTP Setting to activate the Voice Mail to E-mail.**
- If the IPBX-011 / IPBX-011CF got a new message, it will send the message to the user by email immediately. If you are using IPBX-011CF and u just hope the IPBX-011CF to save voice mail to it and not send the email. You just need to input "x" to E-Mail Address.

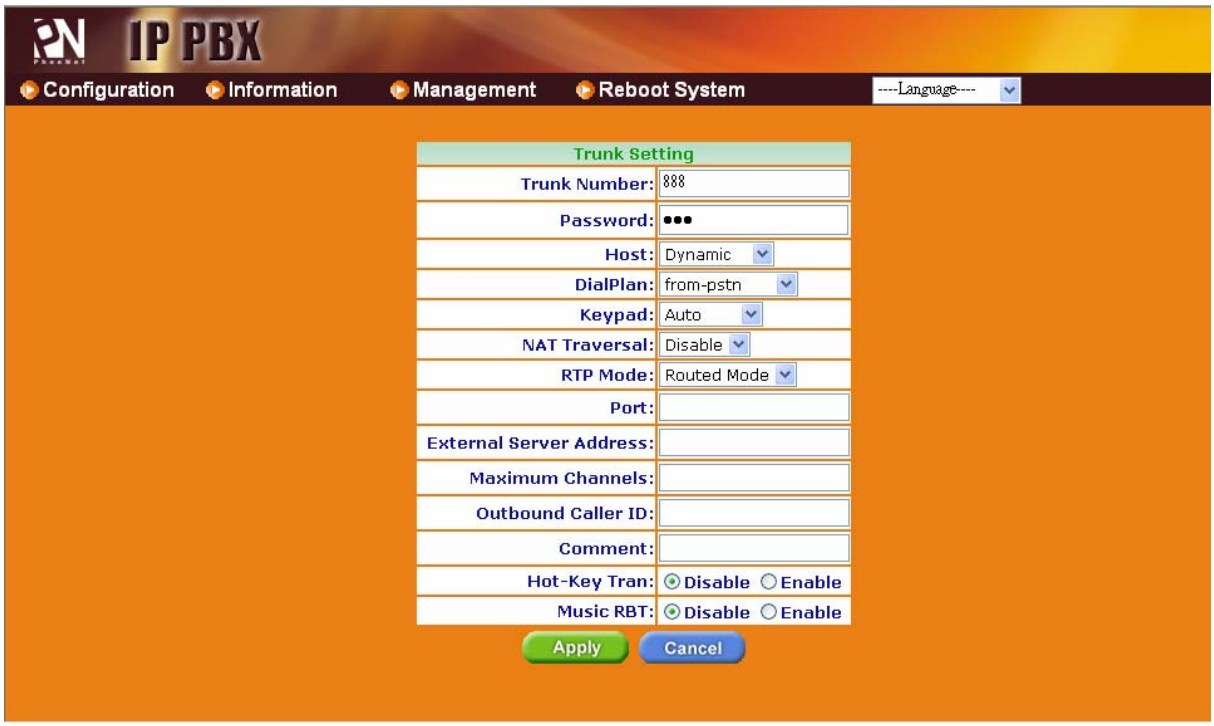
Press Apply to save configuration, or press Cancel to quit configuration.

2.5.3 Trunk Configuration

User has to set Trunk account for Trunk (FXO device, e.g. VG-1440R) to register to IPBX-011 / IPBX-011CF or set some necessary configuration for SIP trunk (For more application, please go to…….). Enter **Configuration → Trunk** to configure Trunk data.
On screen will show **20** sets Trunks. User can press **Modify** to add new Trunk or modify configured Trunk data. Press **Delete** will delete the specified Trunk.


IP PBX
Configuration
Information
Management
Reboot System
----Language----
Trunk
Index
Trunk Number
Comment
Keypad
NAT Traversal
RTP Mode
Setting
1 888 none auto Disable Routed Mode Modify Delete
2 889 none auto Disable Routed Mode Modify Delete
3 none none none Disable Routed Mode Modify Delete
4 none none none Disable Routed Mode Modify Delete
5 none none none Disable Routed Mode Modify Delete
6 none none none Disable Routed Mode Modify Delete
7 none none none Disable Routed Mode Modify Delete
8 none none none Disable Routed Mode Modify Delete
9 none none none Disable Routed Mode Modify Delete
10 none none none Disable Routed Mode Modify Delete
11 none none none Disable Routed Mode Modify Delete

After press Modify can input detail setting for Trunk.



- **Trunk Number:** Assign the number of Trunk. This number is also the register name for Trunk device.

  Note:

  - The Trunk Number can also be a “Trunk ID”. In the Routing Table page, you should define the destination of prefix route. When you define the prefix route, you should set the Trunk ID (Trunk Number) in the Trunk page first; then you could input the correct Trunk ID in the Destination field.

- **Password:** Assign the register password for device to register on IPBX-011 / IPBX-011CF.
- **Host:** Setting the Host to Dynamic will require the trunk to register the IPBX-011 / IPBX-011CF so that the IPBX-011 / IPBX-011CF know how to reach the trunk. You can also set the Host to an IP address or FQDN if you set the Host to [Pre-define]. There will be a field called [Address] appeared when you choose Host to [Pre-define]. This limits only where you place calls to, as the user is allowed to place calls from anywhere.
- **DialPlan:** Define the dialing plan for Trunk. It specifies the location of the instruction used to control what the phone is allowed to do, and what to do with incoming calls for this Trunk. In this field, you can Choose 6 dial level for Extension, including [from-pstn], [ext-only], [ext+R1], [ext+R12], [ext+R123], [ext+allroutes]. You can define an “Outgoing call” record, to a certain route level, as R1, R2…, etc. [from-pstn] is used for Trunk only. [ext-only] means this subscriber can only call to Extension. [ext+R1] means the subscriber with such DialPlan can call to Extension and Route Level with R1.

[ext+R12] means the subscriber with such DialPlan can call to Extension and Route Level with R1 and R2. [ext+R123] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2 and R3. [ext+allroutes] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2, R3 and R4.

Note:

- For more information about Route Level, please refer to the user manual: **3.1.6.1 Outgoing Call Rule**.

- **Keypad:** User can select Keypad type to be RFC2833, In-band, or SIP-Info and Auto. You can choose Auto to auto select the Keypad type. Choose RFC2833, Inband or SIP-Info here will force the Extension use RFC2833, Inband or SIP-Info only and the setting should be also match the Keypad setting of Trunk device.
- **NAT Traversal:** If the Trunk device is behind a device performing NAT, such as firewall or router, and need to register to IPBX-011 / IPBX-011CF on public network, then user has to enable this function. Enable NAT Traversal to force IPBX-011 / IPBX-011CF to ignore the contact information for the Trunk and use the address from which the packets are being received.
- **RTP Mode:** User can choose for two type of RTP mode, one is Routed Mode another is Direct Mode. The voice media will be routed "Peer-to-Peer" if two clients are both setting to Direct Mode. This way will improve the voice quality and reduce the performance wastage of the IPBX-011 / IPBX-011CF.

  Note:

  - If one peer set to Direct Mode but another peer set to Routed Mode, the result will become to Routed Mode.
  - Voice media will still go through the IPBX-011 / IPBX-011CF if the IPBX-011 / IPBX-011CF needs to detect DTMF.
  - If you enable the NAT Traversal function for Extension, the RTP mode will change to Routed Mode directly; this way will avoid the "one-way voice" or "no voice issue" of VoIP.
  - If the both peers are under different subnet, or one peer is under Public IP but another one is under Private IP, **we strongly suggest you to set the RTP mode to Routed Mode to avoid some unexpected voice problems.**

- **Port:** You can use this to define the SIP signal port if you want to listen on a nonstandard SIP signal port.
- **External Server Address:** This field will allow you to set the domain in the SIP From URI. Setting this will avoid some unexpected issue if the service provider needs this for authentication.
- **Maximum Channels:** This will limit the maximum channels for this Trunk. For example, you set 2 into this field; only 2 outgoing calls could go via this Trunk. Default is no limit.

- **Outbound Caller ID:** Some service provider will require the correct registered caller ID if it got an incoming call. Default the IPBX-011 / IPBX-011CF will send the Extension's caller ID to this Trunk, if you set empty here.

  Note:

  - Normally, SIP From URI will contain the Extension's calling ID and IPBX-011 / IPBX-011CF's IP address, but some ITSP may reject this call due to some security issue. You can modify the Calling ID and IP/ Domain in the fields of [External Server Address] and [Outbound Caller ID] when the call is going via the IPBX-011 / IPBX-011CF to the Destination (Trunk) to avoid such security issue.
  - If you set a PheeNet FXO gateway as the Trunk, you can just use the default Trunk 888 and 889 as the FXO's register number.
  - For the FXO gateway, you may just only configure Trunk Number, Password, Host, DialPlan, Keypad, NAT Traversal and RTP Mode.
  - If you set the ITSP as the Trunk, you may need to set the following configure: Port, External Server Address and Outbound Caller ID.
  - For more information, please refer to the user manual **CH5.1Appendix-Application between PheeNet CPE device and IPBX-011 / IPBX-011CF**

- **Comment:** You can input a 10 byte note for each Trunk here.
- **Hot-Key Tran:** Enable this feature will permits the calling party or called party to transfer a call by pressing the ***0 (For Blind Transfer) or *9 (For consultant Transfer)** key if the call is Between Extension and Trunk. Default is disabled.

  Note:

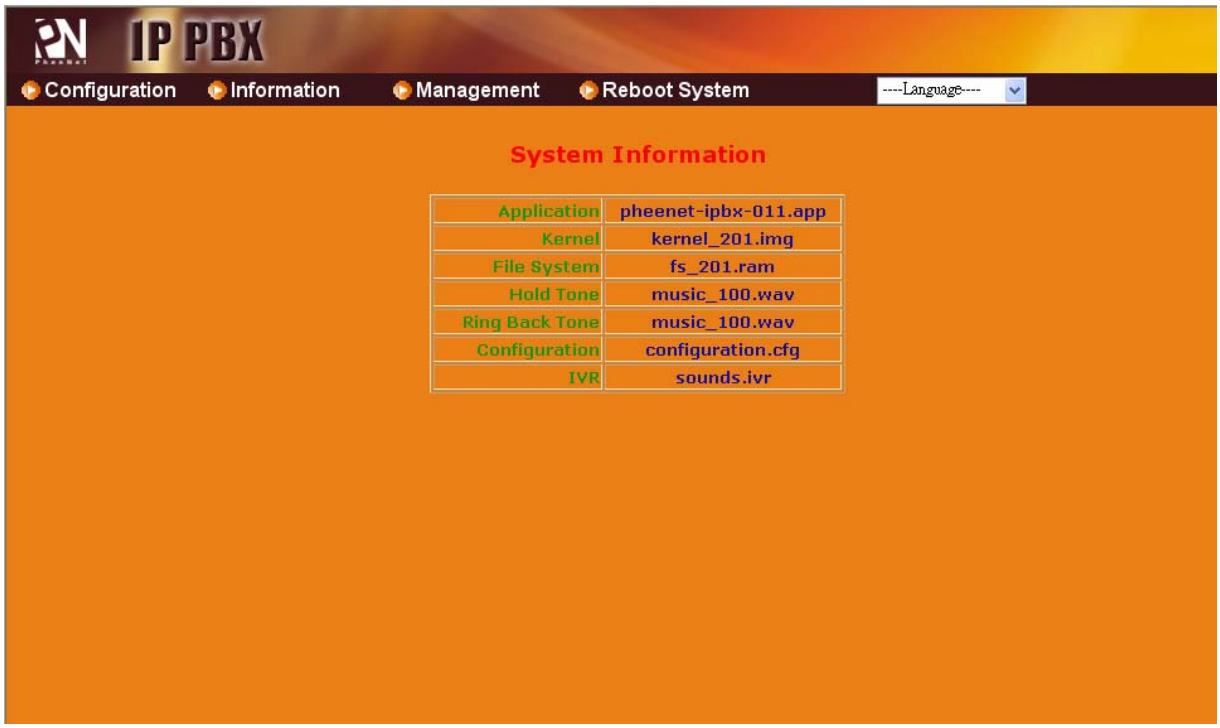
  - If you enable this feature in Trunk page, we suggest you also enable Hot-Key Tran of IP PBX page.
  - Please note that if this option is used, the RTP Mode will always be Routed Mode, as IPBX-011 / IPBX-011CF needs to monitor the call to detect when the caller presses the *0 or *9 key.

- **Music RBT:** Provides music to the calling party until the call is answered

Press Apply to save configuration, or press Cancel to quit configuration.

CH3. Full Web Configurations

After Login IPBX-011 / IPBX-011CF will see screen as below, and there are four main categories, user can click on each category to extend detail items.



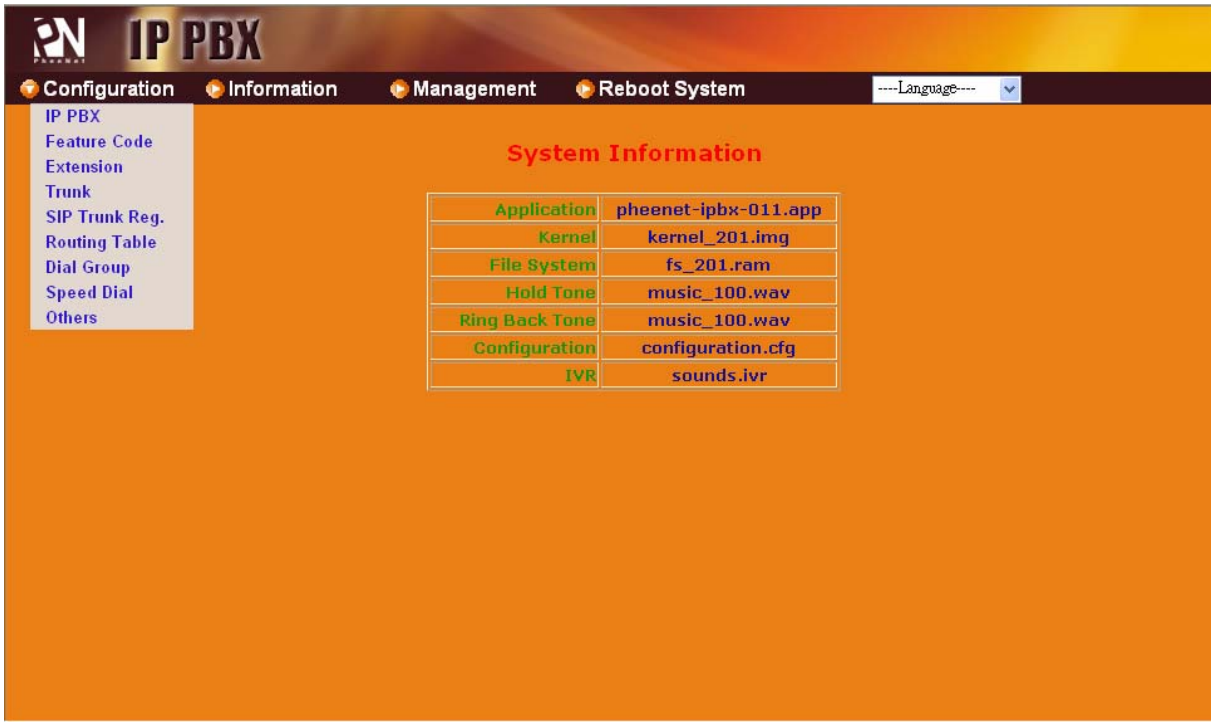
- Configuration: Include all telephony configurations of IPBX-011 / IPBX-011CF.
  - IP PBX
  - Feature Code
  - Extension
  - Trunk
  - SIP Trunk Reg.
  - Routing Table
  - Dial Group
  - Speed Dial
  - Others
- Information: To show related information.
  - Subscriber
  - Call Monitor
- Management: Include all system management of IPBX-011 / IPBX-011CF.
  - Network
  - TimeZone
  - SMTP Setting
  - User Account
  - Firmware Upload
  - Music Upload

- Import Setting
- Export Setting
- Flash Clean

- Reboot System: To reboot system of IPBX-011 / IPBX-011CF.

3.1 Configuration

User can set IPBX-011 / IPBX-011CF telephony configuration under Configuration category.



3.1.1 IP PBX

Enter **Configuration** → **IP PBX** to configure PBX data.

SIP Setting

- **IP-PBX Realm:** Configure Realm of IPBX-011 / IPBX-011CF. This parameter is essential when there is more than one IPBX-011 / IPBX-011CF, and user wants to have inter-calls between IPBX. Please refer to SIP Trunk configuration.
- **Proxy Port:** These optional parameters allow you to control the port on which you wish the IPBX-011 / IPBX-011CF to accept SIP connections. Default is 5060.
- **RTP Port Start:** The voice media will use RTP as the transport protocol. You can define the RTP port range that IPBX-011 / IPBX-011CF opened. Default start port is 10000.
- **RTP Port End:** The voice media will use RTP as the transport protocol. You can define the RTP port range that IPBX-011 / IPBX-011CF opened. Default end port is 20000.

Note:

- Default RTP port range is 10000 to 20000 and default proxy port is 5060. If your IPBX-011 / IPBX-011CF is behind a firewall, please make sure you have already

open the RTP port (10000-20000) and proxy port (5060). And you should also make sure the proxy port (5060) has already mapped to IPBX-011 / IPBX-011CF.

- **Max Expire Time:** This sets the maximum amount of time, in seconds. This is used for the registration expire time. If this value less than the expired time from the client, then the IPBX-011 / IPBX-011CF will reply a certain expire time which is defined in “Default Expire Time” to client.
- **Default Expire Time:** This sets the default SIP registration expiration time, in seconds. A client will normally define this value when it initially registers, so the default value you set here will be used only if the client does not specify a timeout when it registers. If you are registering to another SIP Trunk, this is the registration timeout that it will send to the far end.

Codec Priority

- **Codec Priority:** Codec negotiation is attempted in the order in which the Codecs Priority is defined. Default is G729 with first priority, G711u with second priority, G711A with third priority and GSM is fourth priority. That means the IPBX-011 / IPBX-011CF can only recognize these four Codecs and it will force the Codecs with the specified priority and forward to another subscriber. Now, IPBX-011 / IPBX-011CF can support G729, G711U, G711A, GSM and G723 Pass-Thru.

PBX Setting

- **Operator:** Assign operator access code. When caller dial in IPBX-011 / IPBX-011CF, press this assigned code can reach operator.
- **to EXT:** Assign operator ‘s extension number. When caller press operator’s access code, IPBX-011 / IPBX-011CF will transfer this call to the assigned Extension.
- **AA End To OP:** **999 is the access code to reach Auto Attendant. When caller dial into the Auto Attendant, IPBX-011 / IPBX-011CF will play greeting message 3 times. After the third greeting played, IPBX-011 / IPBX-011CF will play “Thank you” to disconnect the call. Choose the [AA End To OP] to Enable will trigger IPBX-011 / IPBX-011CF forward the call to operator after playing greeting message 3 times.
- **CDR Mode:** Chose the mode for CDR. You can disable the CDR or send the CDR record to a certain CDR server. You can also store the CDR records within IPBX-011 / IPBX-011CF.
  - **Disable:** Chose this one to Disable CDR function.
  - **RealTime:** You can install a CDR program to collect and store CDR records. The CDR program is PheeNet proprietary. For more information about such CDR program, please contact with your contact window of PheeNet.

    Note:

    If you choose the CDR Mode to RealTime, You should install a CDR program to collect and store CDR records. You must also input the IP of CDR server into the

[CDR-Server IP] field. Every 5 seconds, IPBX-011CF will send a CDR record to CDR-Server by port 23519. And CDR-Server will collect such records as a CSV file. The port of CDR server is changeable. Default is 23519.

- **Storage:** If you do not prepare a PC as a CDR server. You can also define the CDR Mode to Storage. IPBX-011 / IPBX-011CF will store the CDR records within itself.

  Note:

  If you chose the CDR Mode to Store, you can download the CDR file by pressing Export button of Export CDR field. When you export CDR files, IPBX-011 / IPBX-011CF will clean the CDR record from it. IPBX-011 / IPBX-011CF can only store 500 CDR records within itself. If you do not export the CDR file but the records is over than 500, the oldest one will be instead by newest CDR record.

- **CDR-Server IP:** If you choose the CDR Mode to RealTime, here you can input the IP address of CDR server which you installed the PheeNet CDR program.
- **CDR-Server Port:** If you choose the CDR Mode to RealTime, here you can change the destination port of CDR server. Default is 23519.
- **Export CDR:** If you chose the CDR Mode to Storage, you can press Export button to download the CDR file. The CDR file is within a CSV format.
- **Ext Ring Time:** This field defines the timeout value if the call is between Extension and Extension. Default is 20 seconds.
- **Out Ring Time:** This field defines the timeout value if the call is from Extension to outside (define by routing table). Default is no limitation.
- **Hot-Key Tran**: User can enable or disable Hot-key transfer function. If the call is establish between Extensions. Enable this feature will permits the calling party or called party to transfer a call by pressing the ***0 (For Blind Transfer) or *9 (For consultant Transfer)** key. Default is disabled.

  Note:

  - Please note that if this option is used, the RTP Mode will always be Routed Mode, as IPBX-011 / IPBX-011CF needs to monitor the call to detect when the caller presses the *0 or *9 key.

- **Music RBT:** Enabling this option will provide music to the calling party until the call is answered.
- **Call Monitor Refresh:** IPBX-011 / IPBX-011CF have call monitor function. The call situation will be refreshed by the refresh time. Default is 30 seconds and user can change it here.

System Announcement

- **Scheduled Greeting:** You can define a business time for the company announcement.
  - **Office Hour AM:** Define the work time for AM. Default is 09:00-11:59. The sound file for greeting of work time is: greeting-day.gsm. You can change it by dialing to **111.
  - **Lunch Break:** Define the time for lunch break. Default is 12:00-12:59. The sound file for greeting of lunch break is: greeting-noon.gsm. You can change it by dialing to **112.
  - **Office Hour PM:** Define the work time for PM. Default is 13:00-17:59. The sound file for greeting of work time is: greeting-day.gsm. You can change it by dialing to **111.
  - **Day:** Define the work days. Default is Monday to Friday.

    Note:

    If the time is a non-working time, the greeting files will be greeting-night.gsm. You can change it by dialing to **113. For more information about the greeting record, please refer to user manual: **CH4.1.3 How to record the other system prompts**

- **Fixed Greeting:** You can enforce the company announcement as a fixed greeting.
  - **Disable:** If you disable the Fixed Greeting, the announcement will base on the above work time setting.
  - **Working Time:** Chose this one will enforce the company announcement as a greeting for work time: greeting-day.gsm.
  - **Non-working Time:** Chose this one will enforce the company announcement as a greeting for non-work time: greeting-night.gsm.
  - **Special Greeting:** Chose this one will enforce the company announcement as a special greeting: greeting-temporary.gsm. You can record it by dialing **115.

Behind NAT

- **Behind NAT:** If your IPBX-011 / IPBX-011CF is behind NAT, we strongly suggest u to enable Behind NAT to avoid some unexpected issue, such as “one way voice”.
- **External IP:** If you input External IP, IPBX-011 / IPBX-011CF will take that IP address as its argument. If IPBX-011 / IPBX-011CF is behind NAT, the SIP header will normally use the private IP address assigned to the server. The remote device will not know how to route back to this address; thus, it must be replaced with a valid, routable address.
- **External Host:** External Host takes a fully qualified domain name as its argument. If IPBX-011 / IPBX-011CF is behind NAT, the SIP header will normally use the private IP address assigned to the server. If you set this option, IPBX-011 / IPBX-011CF will perform periodic DNS lookups on the hostname and replace the private IP address with the IP address returned from the DNS lookup.

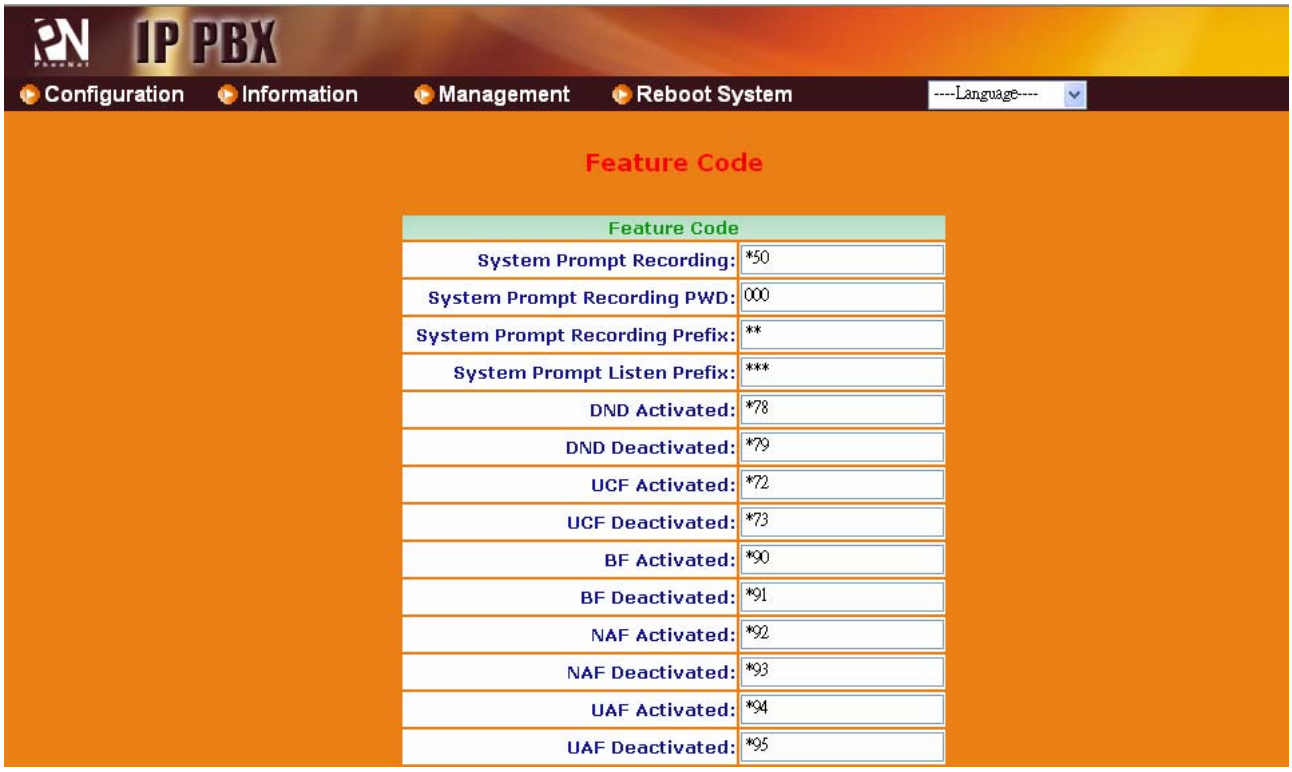
  Note:

- You should not set both of External IP and External Host together; otherwise there will be some unexpected problems appeared. That means you can only chose one for External IP or External Host for “Behind NAT”

- **Local Net:** Local Net is used to tell IPBX-011 / IPBX-011CF which IP addresses are considered local. If one of caller or callee is not under Local Net, IPBX-011 / IPBX-011CF will set the address in the SIP header that can be translated to that specified by External IP or the IP address can be looked up with External Host. The format will be **IP/ Subnet Mask**. Example: **192.168.1.0/ 255.255.255.0**

3.1.2 Feature Code

This page will let user modify his own feature codes.



- **System Prompt Recording:** User could dial an access code for system prompt recording, such as **111 for greeting-day.gsm. Before dialing to **111, user should dial to the feature code of “System Prompt Recording” to start recording. Default feature code for System Prompt Recording is [*50]. So the recording procedure should be “Dial to [*50]→ Input password (which defined in [System Prompt Recording PWD])→ dial to access code (i.e. **111)→ Start recording”. Add the feature for recording will avoid an unknown user incautious to record the system prompt.
- **System Prompt Recording PWD:** Before recording System Prompt, user may need to input password. Here you can specify the password for System Prompt Recording. Default is 000. That means password is not necessary if this field is empty.
- **System Prompt Recording Prefix:** The prefix is for access code of System Prompt Recording. Default is **. For example, the access code for [greeting-day.gsm] is **111.

So the System Prompt Recording Prefix is **. If you change the Prefix to *1, that means the access code for [greeting-day.gsm] should be *1111.

Note:

- Previously, you can just dial to the access code, such as **111, for announcement recording. But we change this procedure due to the security issue.
  For example, the record procedure of greeting message will be: “Dial to [*50]→ Input password [000]→ dial to access code [**111]→ Start to record greeting-day.gsm”. For more information about announcement recording, please refer to user manual: **CH4.1.3 How to record the other system prompts**

- **System Prompt Listen Prefix:** The prefix is for access code of System Prompt listening. Default is ***. For example, the access code for [greeting-day.gsm] listening is ***111. So the System Prompt Recording Prefix is ***. If you change the Prefix to *11, that means the access code for [greeting-day.gsm] listening should be *11111.
- **DND Activated:** The code to activate DND. Default is *78.
- **DND Deactivated:** The code to deactivate DND. Default is *79.
- **UCF Activated:** The code to activate Unconditional Forward. Default is *72. For example, dialing to *72101 will forward all the call to 101.
- **UCF Deactivated:** The code to deactivate Unconditional Forward. Default is *73.
- **BF Activated:** The code to activate Busy Forward. Default is *90. For example, dialing to *90101 will forward call to 101 if you are on the phone.
- **BF Deactivated:** The code to deactivate Busy Forward. Default is *91.
- **NAF Activated:** The code to activate No Answer Forward. Default is *92. For example, dialing to *92101 will forward call to 101 if you are not answering.
- **NAF Deactivated:** The code to deactivate No Answer Forward. Default is *93.
- **UAF Activated:** The code to activate Unavailable Forward. Default is *94. For example, dialing to *94101 will forward call to 101 if your phone is not registering.
- **UAF Deactivated:** The code to deactivate Unavailable Forward. Default is *95.
- **CF Deactivated:** Disable all of the forward function, including Unconditional Forward, Busy Forward, No Answer Forward and Unavailable Forward. Default is *96.
- **Voice Mail Box Login:** For IPBX-011CF only. IPBX-011CF has the ability to store voice mail within itself, and user can just dial to the feature code to login the voice mail system. The feature code of voice mail system default is *98.
- **Camp-On Activated:** This function means [call back on busy]. For example, you dial to 101 but 101 is on the phone, then you should hear an announcement for called person is busy. You could dial to *66 by default to trigger the IPBX-011 / IPBX-011CF call back to you when 101 is idle. This function will let u talk to called party immediately when called party is not busy.

  Note:

  - This Function is only workable when voice mail function is disabled.

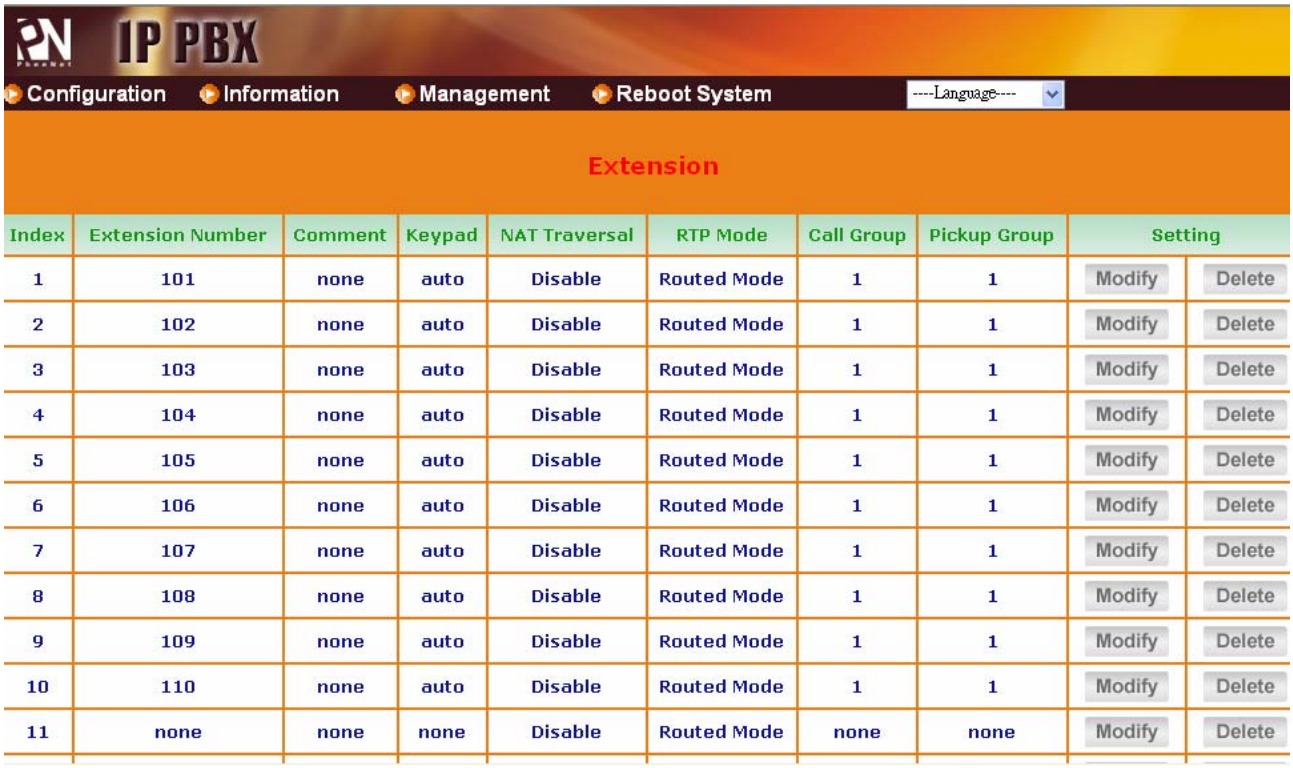
- When this function is enabled, IPBX-011 / IPBX-011CF will check the status of called party every 20 seconds, at most 15 times. That means the camp-on function may be performed when called party is idled after 20 seconds at most. And 300 (20*15) seconds later, this function will not be workable.

- **CLIR(per call) Prefix:** Default is *67. Add this prefix will hide the caller's number. For example, 101 does not hope to show the caller id to 102. 101 can just dial to "*67102", where the *67 is the prefix for CLIR. When 102 got the incoming call, the LCD of 102 should display "Anonymous". If 101 just dial to "102", then 102 should see the Caller ID as 101.
- **CLIR Activated:** Default is *31. For example. 101 dial to "*31", IPBX-011 / IPBX-011CF should add the CLIR record for 101 into its database. When 101 call to 102, 103...,etc. The LCD of called party should always show "Anonymous".
- **CLIR Deactivated:** Default is *32. Dialing to *32 will remove the CLIR record from the database of IPBX-011 / IPBX-011CF.

3.1.3 Extension

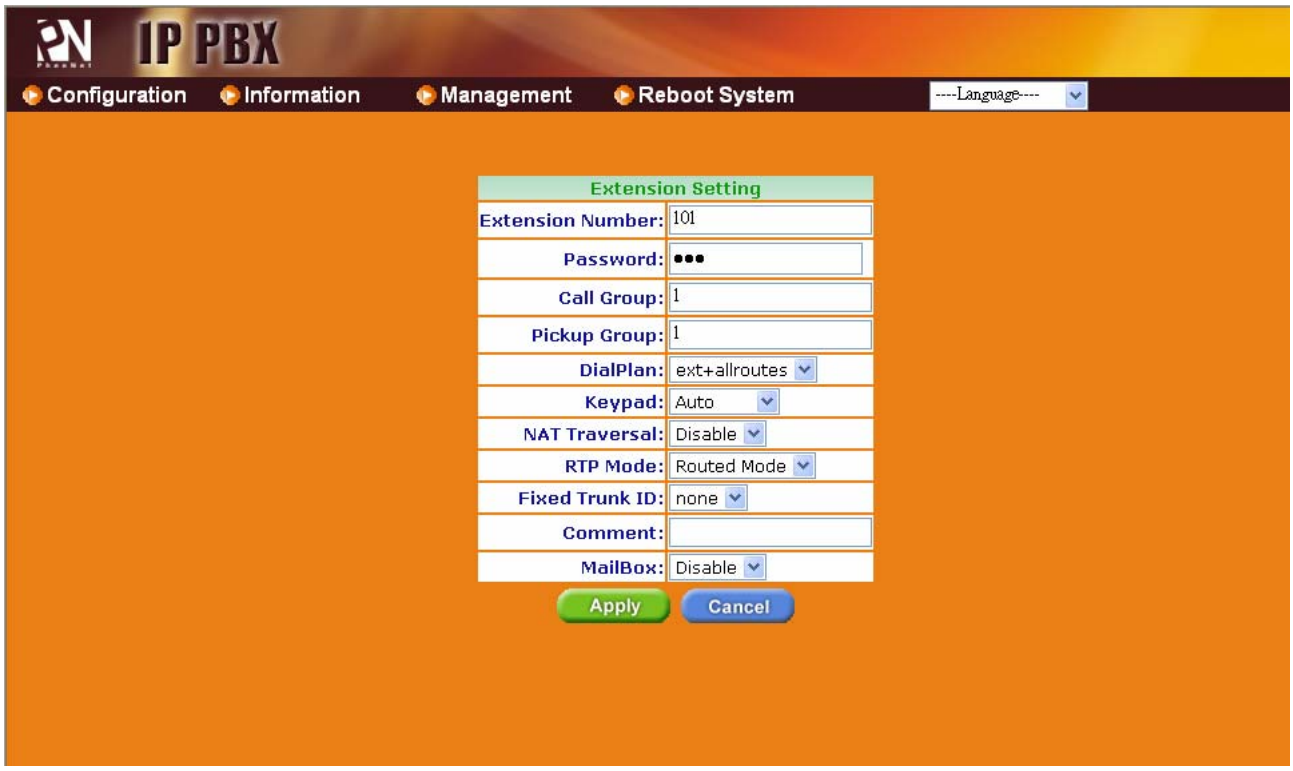
User has to set Extension account for other device to register on IPBX-011 / IPBX-011CF.

Enter **Configuration** → **Extension** to configure Extension data. On screen will show 100 sets Extension. User can press **Modify** to add new Extension or modify configured Extension data. Press **Delete** will delete the specified Extension.



Index	Extension Number	Comment	Keypad	NAT Traversal	RTP Mode	Call Group	Pickup Group	Setting	
1	101	none	auto	Disable	Routed Mode	1	1	Modify	Delete
2	102	none	auto	Disable	Routed Mode	1	1	Modify	Delete
3	103	none	auto	Disable	Routed Mode	1	1	Modify	Delete
4	104	none	auto	Disable	Routed Mode	1	1	Modify	Delete
5	105	none	auto	Disable	Routed Mode	1	1	Modify	Delete
6	106	none	auto	Disable	Routed Mode	1	1	Modify	Delete
7	107	none	auto	Disable	Routed Mode	1	1	Modify	Delete
8	108	none	auto	Disable	Routed Mode	1	1	Modify	Delete
9	109	none	auto	Disable	Routed Mode	1	1	Modify	Delete
10	110	none	auto	Disable	Routed Mode	1	1	Modify	Delete
11	none	none	none	Disable	Routed Mode	none	none	Modify	Delete

After press Modify can input detail setting for Extension.



- **Extension Number:** Assign the number of Extension. This number is also the register name for device.
- **Password:** Assign the register password for device to register on IPBX-011 / IPBX-011CF.
- **Call Group:** You can use the Call Group parameter to assign an Extension to one or more groups.
- **Pickup Group:** You can use the Pickup Group option in conjunction with this parameter to allow a ringing phone to be answered from another extension.

  Note:

  - The Pickup Group option is used to control which Call Groups a channel may pick up—a channel is given authority to answer another ringing channel if it is assigned to the same Pickup Group as the ringing channel's Call Group. By default, remote ringing extensions can be answered with ***8**.
  - You can define multiple Call Groups and Pickup Groups for one Extension by a "comma". For example, you can input "1,3,5" into Call Group or Pickup Group.

- **DialPlan:** Define the dialing plan for Extension. It specifies the location of the instruction used to control what the phone is allowed to do, and what to do with incoming calls for this extension. In this field, you can Choose 5 dial level for Extension, including [ext-only], [ext+R1], [ext+R12], [ext+R123], [ext+allroutes]. You can define an "Outgoing call" record, to a certain Route Level, as R1, R2…, etc. [ext-only] means this subscriber can only call to Extension. [ext+R1] means the subscriber with such DialPlan can call to Extension and Route Level with R1. [ext+R12] means the subscriber with such DialPlan can call to Extension and Route Level with R1 and R2.

[ext+R123] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2 and R3. [ext+allroutes] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2, R3 and R4.

Note:

- For more information about Route Level, please refer to the user manual: **CH3.1.6.1 Outgoing Call Rule**.

- **Keypad:** User can select Keypad type to be RFC2833, In-band, SIP-Info and Auto. You can choose Auto to auto select the Keypad type. Choose RFC2833, Inband or SIP-Info here will force the Extension use RFC2833, Inband or SIP-Info only and the setting should be also match the Keypad setting of Extension device.

  Note:

  - Now IPBX-011CF could not support G729 with Inband Keypad type. If IPBX-011 / IPBX-011CF detects the caller or callee not support RFC2833 DTMF type. Then IPBX-011CF will force the Codec to G711 to make sure the DTMF detection is correctly.

- **NAT Traversal:** If the Extension device is behind a device performing NAT, such as firewall or router, and need to register to IPBX-011 / IPBX-011CF on public network, then user has to enable this function. Enable NAT Traversal to force IPBX-011 / IPBX-011CF to ignore the contact information for the Extension and use the address from which the packets are being received.
- **RTP Mode:** User can choose for two type of RTP mode, one is Routed Mode another is Direct Mode. The voice media will be routed “Peer-to-Peer” if two clients are both setting to Direct Mode. This way will improve the voice quality and reduce the performance wastage of the IPBX-011 / IPBX-011CF.

  Note:

  - If one peer set to Direct Mode but another peer set to Routed Mode, the result will become to Routed Mode.
  - Voice media will still go through the IPBX-011 / IPBX-011CF if the IPBX-011 / IPBX-011CF needs to detect DTMF.
  - If you enable the NAT Traversal function for Extension, the RTP mode will change to Routed Mode directly; this way will avoid the “one-way voice” or “no voice issue” of VoIP.
  - If the both peers are under different subnet, or one peer is under Public IP but another one is under Private IP, **we strongly suggest you to set the RTP mode to Routed Mode to avoid some unexpected voice problems.**

- **Fixed Trunk ID:** User can define a Fixed Trunk for a certain extension. When such extension makes an outgoing call via routing table, IPBX-011 / IPBX-011CF will check

"Fixed Outgoing Call Rule" first. If "Fixed Outgoing Call Rule" is enabled, then IPBX-011 / IPBX-011CF will confirm the Fix Trunk ID for the calling party. That means the outbound call will be routed by Fixed Trunk ID, if you define the Fixed Trunk ID for the calling party and you also enable "Fixed Outgoing Call Rule".

Note:

- For more information about Fixed Outgoing Call Rule, please refer to the user manual: **CH3.1.6.1 Outgoing Call Rule.**

- **Comment:** You can input a 10 byte note for each extension here.
- **Mail Box:** User can select to disable or enable mail box function. If this function is enabled, user could input e-mail address for the Extension. When having voice mail of incoming call, system will send this voice mail to the specified e-mail address. You can also login the mail box system by dialing to *98, if you are using an IPBX-011CF.
- **E-Mail Address:** This field will appear when you enable Mail Box function and you can input the E-Mail Address here for voice mail to E-mail.
- **VM Login Password:** This field only exists if you are using an IPBX-011CF. IPBX-011CF has a built-in CF card to save voice mail. And user can login voice mail system by dialing to *98, then input the mailbox number and password for voice mail. User can define the Voice Mail box login password here. Another way to login the voice mail system is dial to *98+extension number. For example, dial to *98101 can login EXT101's voice mail box, and caller can just input password to access voice mail.

  Note:

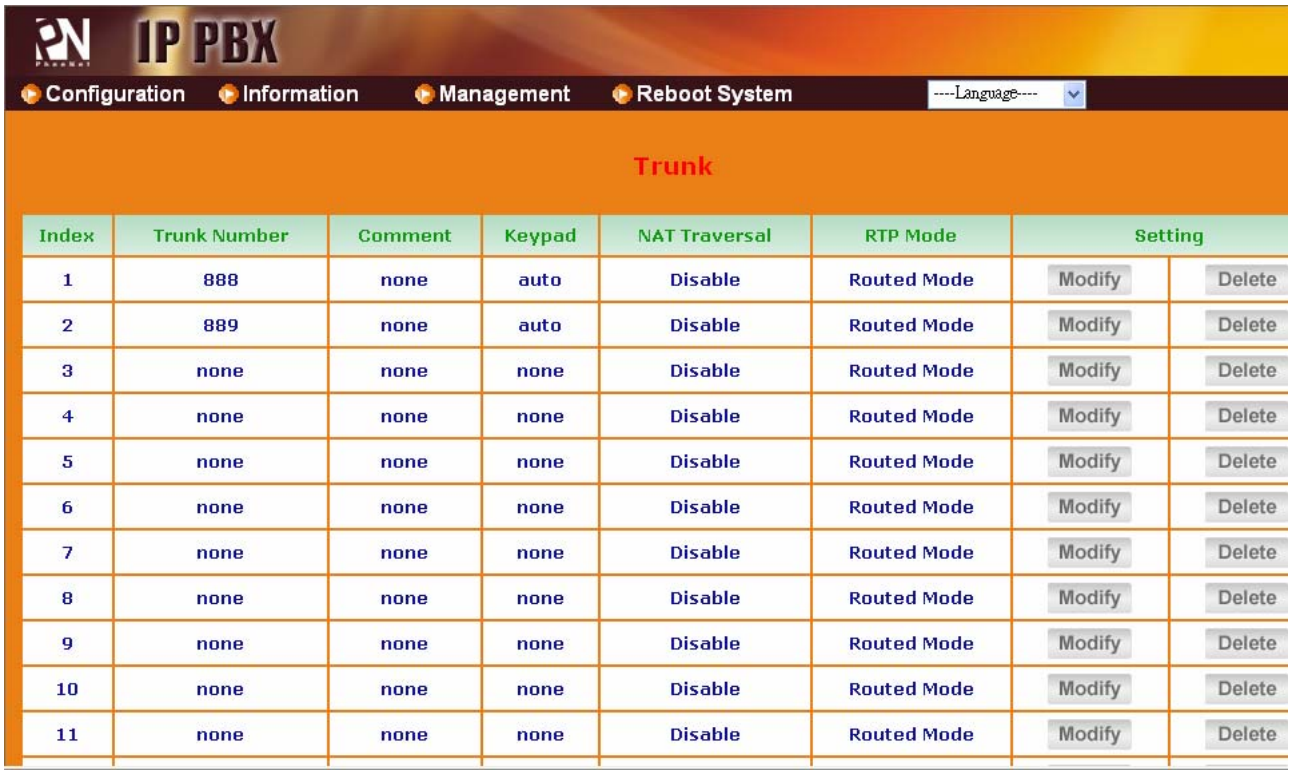
  - **Please remember set the SMTP in the page of Management → SMTP Setting to activate the Voice Mail to E-mail.**
  - If the IPBX-011 / IPBX-011CF got a new message, it will send the message to the user by email immediately. If you are using IPBX-011CF and just hope the IPBX-011CF to save voice mail to it and not send the email. You just need to input "x" to E-Mail Address.

Press Apply to save configuration, or press Cancel to quit configuration.

3.1.4 Trunk

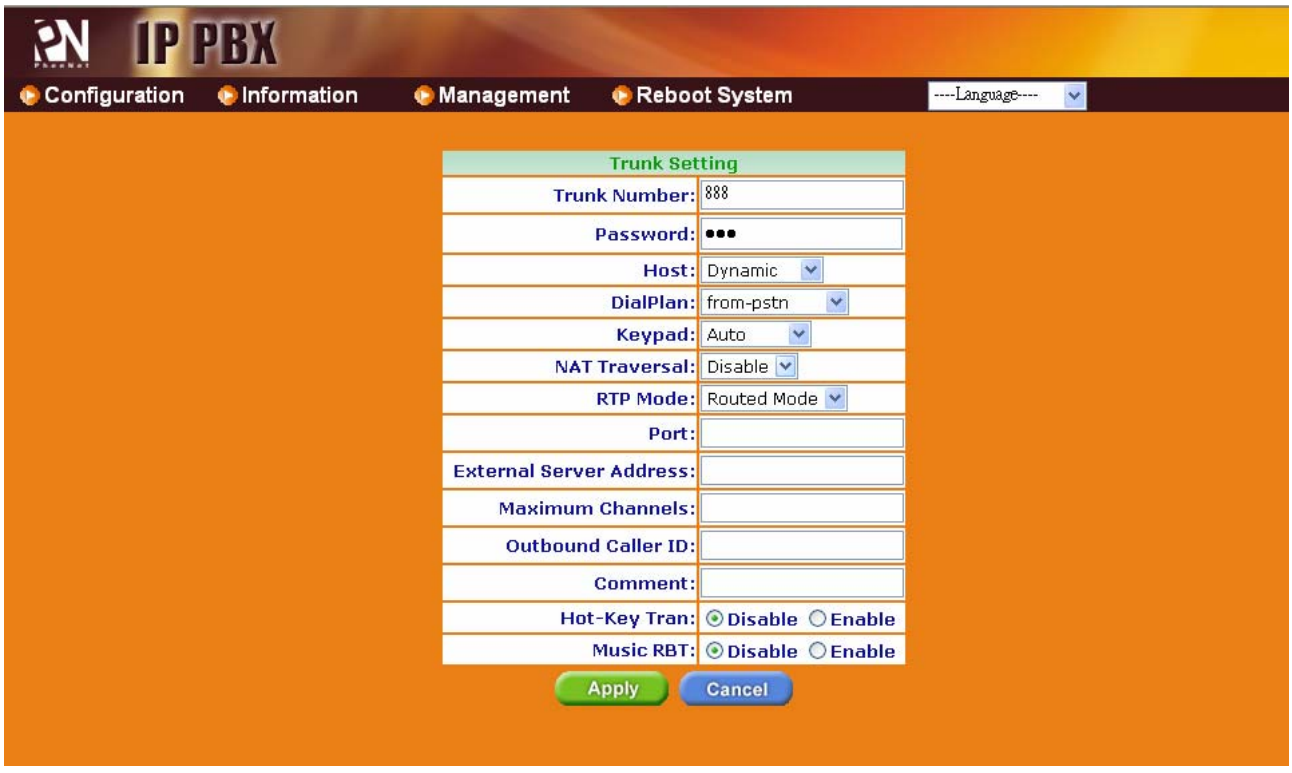
User has to set Trunk account for Trunk (FXO device, e.g. VG-1440R) to register to IPBX-011 / IPBX-011CF or set some necessary configuration for SIP trunk (For more application, please go to…….). Enter **Configuration → Trunk** to configure Trunk data.

On screen will show **20** sets Trunks. User can press **Modify** to add new Trunk or modify configured Trunk data. Press **Delete** will delete the specified Trunk.

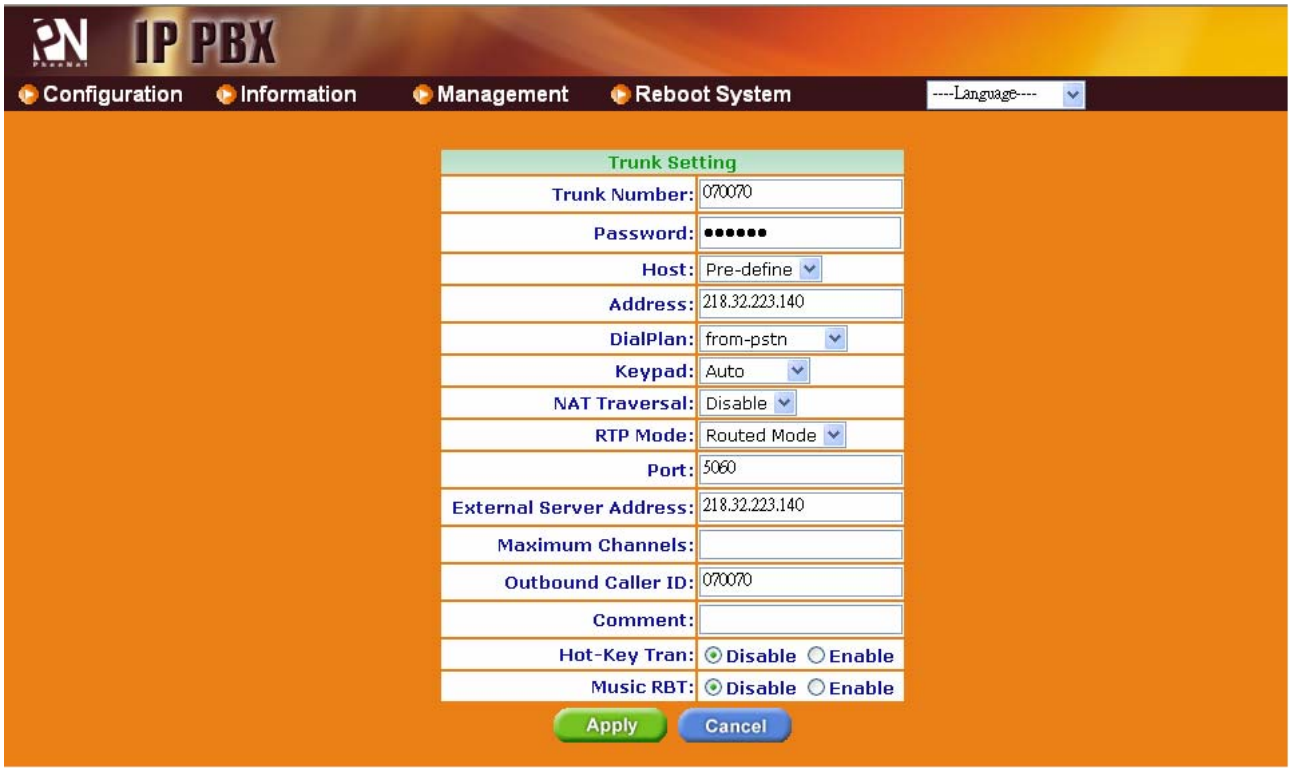

IP PBX
Configuration
Information
Management
Reboot System
----Language----
Trunk
Index
Trunk Number
Comment
Keypad
NAT Traversal
RTP Mode
Setting
1 888 none auto Disable Routed Mode Modify Delete
2 889 none auto Disable Routed Mode Modify Delete
3 none none none Disable Routed Mode Modify Delete
4 none none none Disable Routed Mode Modify Delete
5 none none none Disable Routed Mode Modify Delete
6 none none none Disable Routed Mode Modify Delete
7 none none none Disable Routed Mode Modify Delete
8 none none none Disable Routed Mode Modify Delete
9 none none none Disable Routed Mode Modify Delete
10 none none none Disable Routed Mode Modify Delete
11 none none none Disable Routed Mode Modify Delete

After press Modify can input detail setting for Trunk.

Example 1: Set Trunk for FXO gateway



Example 2: Set Trunk ID for SIP Trunk



- **Trunk Number:** Assign the number of Trunk. This number is also the register name for Trunk device.

  Note:

  - The Trunk Number can also be a “Trunk ID”. In the Routing Table page, you should define the destination of prefix route. When you define the prefix route, you should set the Trunk ID (Trunk Number) in the Trunk page first; then you could input the correct Trunk ID in the Destination field.

- **Password:** Assign the register password for device to register on IPBX-011 / IPBX-011CF.
- **Host:** Setting the Host to Dynamic will require the trunk to register the IPBX-011 / IPBX-011CF so that the IPBX-011 / IPBX-011CF know how to reach the trunk. You can also set the Host to an IP address or FQDN if you set the Host to [Pre-define]. There will be a field called [Address] appeared when you choose Host to [Pre-define]. This limits only where you place calls to, as the user is allowed to place calls from anywhere.
- **DialPlan:** Define the dialing plan for Trunk. It specifies the location of the instruction used to control what the phone is allowed to do, and what to do with incoming calls for this Trunk. In this field, you can Choose 6 dial level for Extension, including [from-pstn], [ext-only], [ext+R1], [ext+R12], [ext+R123], [ext+allroutes]. You can define an “Outgoing call” record, to a certain route level, as R1, R2…, etc. [from-pstn] is used for Trunk only. [ext-only] means this subscriber can only call to Extension. [ext+R1] means the subscriber with such DialPlan can call to Extension and Route Level with R1. [ext+R12] means the subscriber with such DialPlan can call to Extension and Route

Level with R1 and R2. [ext+R123] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2 and R3. [ext+allroutes] means the subscriber with such DialPlan can call to Extension and Route Level with R1, R2, R3 and R4.

Note:

- For more information about Route Level, please refer to the user manual: **CH3.1.6.1 Outgoing Call Rule**.

- **Keypad:** User can select Keypad type to be RFC2833, In-band, or SIP-Info and Auto. You can choose Auto to auto select the Keypad type. Choose RFC2833, Inband or SIP-Info here will force the Extension use RFC2833, Inband or SIP-Info only and the setting should be also match the Keypad setting of Trunk device.
- **NAT Traversal:** If the Trunk device is behind a device performing NAT, such as firewall or router, and need to register to IPBX-011 / IPBX-011CF on public network, then user has to enable this function. Enable NAT Traversal to force IPBX-011 / IPBX-011CF to ignore the contact information for the Trunk and use the address from which the packets are being received.
- **RTP Mode:** User can choose for two type of RTP mode, one is Routed Mode another is Direct Mode. The voice media will be routed "Peer-to-Peer" if two clients are both setting to Direct Mode. This way will improve the voice quality and reduce the performance wastage of the IPBX-011 / IPBX-011CF.

  Note:

  - If one peer set to Direct Mode but another peer set to Routed Mode, the result will become to Routed Mode.
  - Voice media will still go through the IPBX-011 / IPBX-011CF if the IPBX-011 / IPBX-011CF needs to detect DTMF.
  - If you enable the NAT Traversal function for Extension, the RTP mode will change to Routed Mode directly; this way will avoid the "one-way voice" or "no voice issue" of VoIP.
  - If the both peers are under different subnet, or one peer is under Public IP but another one is under Private IP, **we strongly suggest you to set the RTP mode to Routed Mode to avoid some unexpected voice problems.**

- **Port:** You can use this to define the SIP signal port if you want to listen on a nonstandard SIP signal port.
- **External Server Address:** This field will allow you to set the domain in the SIP From URI. Setting this will avoid some unexpected issue if the service provider needs this for authentication.
- **Maximum Channels:** This will limit the maximum channels for this Trunk. For example, you set 2 into this field; only 2 outgoing calls could go via this Trunk. Default is no limit.
- **Outbound Caller ID:** Some service provider will require the correct registered caller ID

if it got an incoming call. Default the IPBX-011 / IPBX-011CF will send the Extension's caller ID to this Trunk, if you set empty here.

Note:

- Normally, SIP From URI will contain the Extension's calling ID and IPBX-011 / IPBX-011CF's IP address, but some ITSP may reject this call due to some security issue. You can modify the Calling ID and IP/ Domain in the fields of [External Server Address] and [Outbound Caller ID] when the call is going via the IPBX-011 / IPBX-011CF to the Destination (Trunk) to avoid such security issue.
- If you set a PheeNet FXO gateway as the Trunk, you can just use the default Trunk 888 and 889 as the FXO's register number.
- For the FXO gateway, you may just only configure Trunk Number, Password, Host, DialPlan, Keypad, NAT Traversal and RTP Mode.
- If you set the ITSP as the Trunk, you may need to set the following configure: Port, External Server Address and Outbound Caller ID.
- For more information, please refer to the user manual **CH5.1 Appendix-Application between PheeNet CPE device and IPBX-011 / IPBX-011CF**

- **Comment:** You can input a 10 byte note for each Trunk here.
- **Hot-Key Tran:** Enable this feature will permits the calling party or called party to transfer a call by pressing the ***0 (For Blind Transfer) or *9 (For consultant Transfer)** key if the call is Between Extension and Trunk. Default is disabled.

  Note:

  - If you enable this feature in Trunk page, we suggest you also enable Hot-Key Tran of IP PBX page.
  - Please note that if this option is used, the RTP Mode will always be Routed Mode, as IPBX-011 / IPBX-011CF needs to monitor the call to detect when the caller presses the *0 or *9 key.

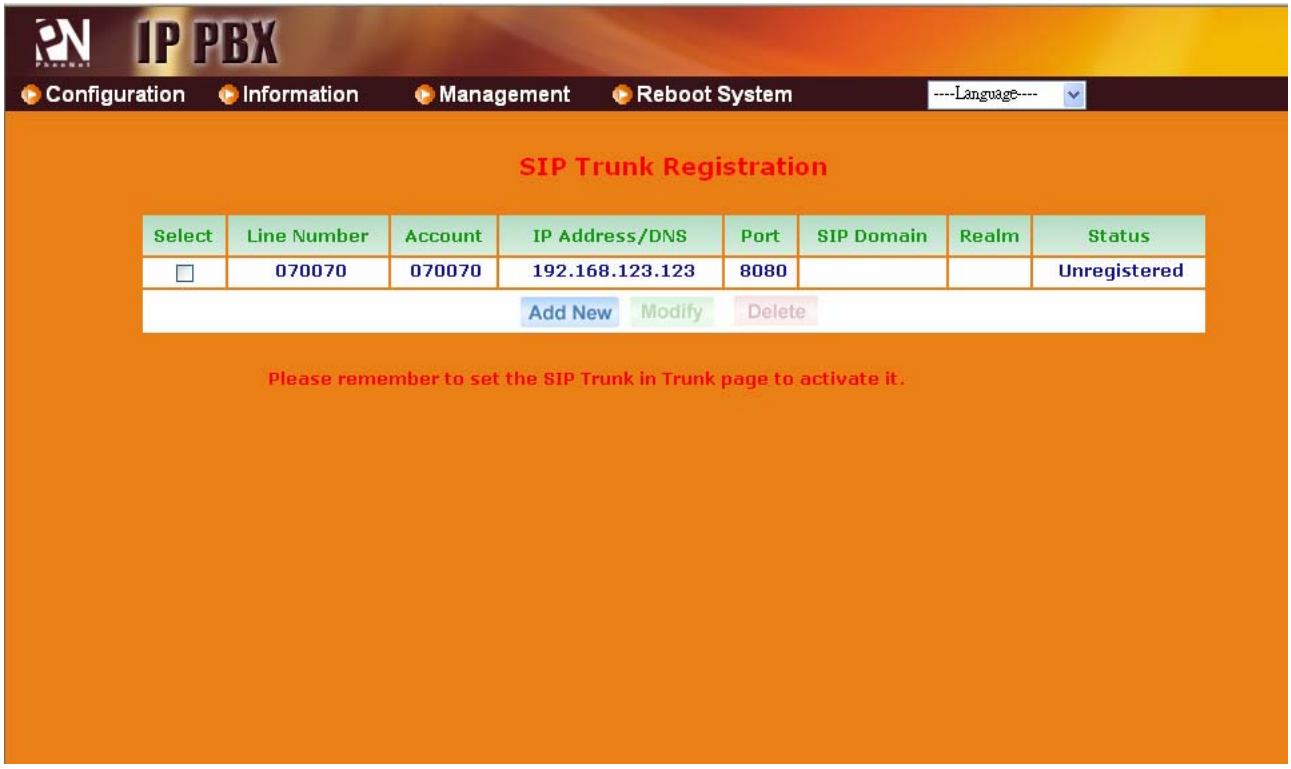
- **Music RBT:** Provides music to the calling party until the call is answered

Press Apply to save configuration, or press Cancel to quit configuration.

3.1.5 SIP Trunk Reg.

SIP Trunk is for IPBX-011 / IPBX-011CF **to register to other systems only**, such as ITSP or another IPBX-011 / IPBX-011CF.

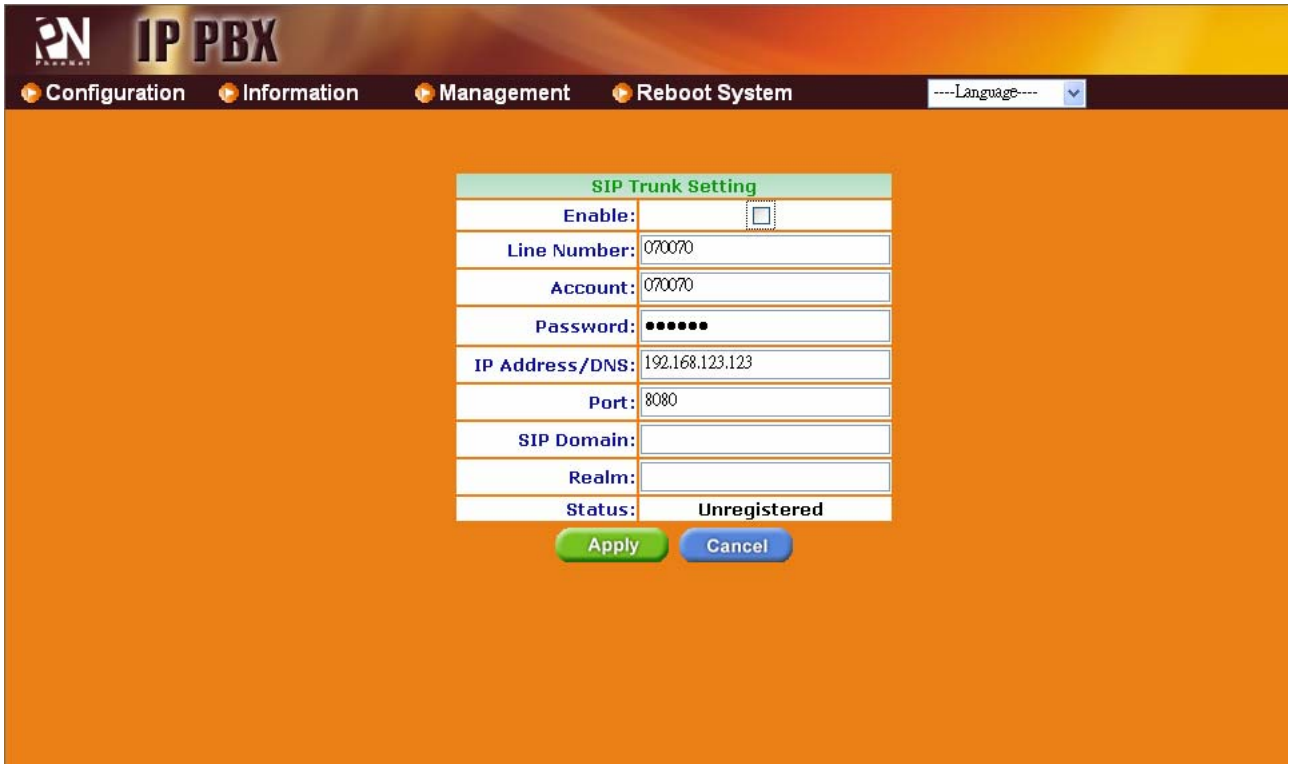
On screen of SIP Trunk will show all of the sets of SIP Trunks. You will find out the registered Account and registered server IP address, port number, Realm and the Register Status. User can press **Add New** to add new Trunk or **Modify** to configure the specified SIP Trunk. Press **Delete** will delete the specified SIP Trunk.



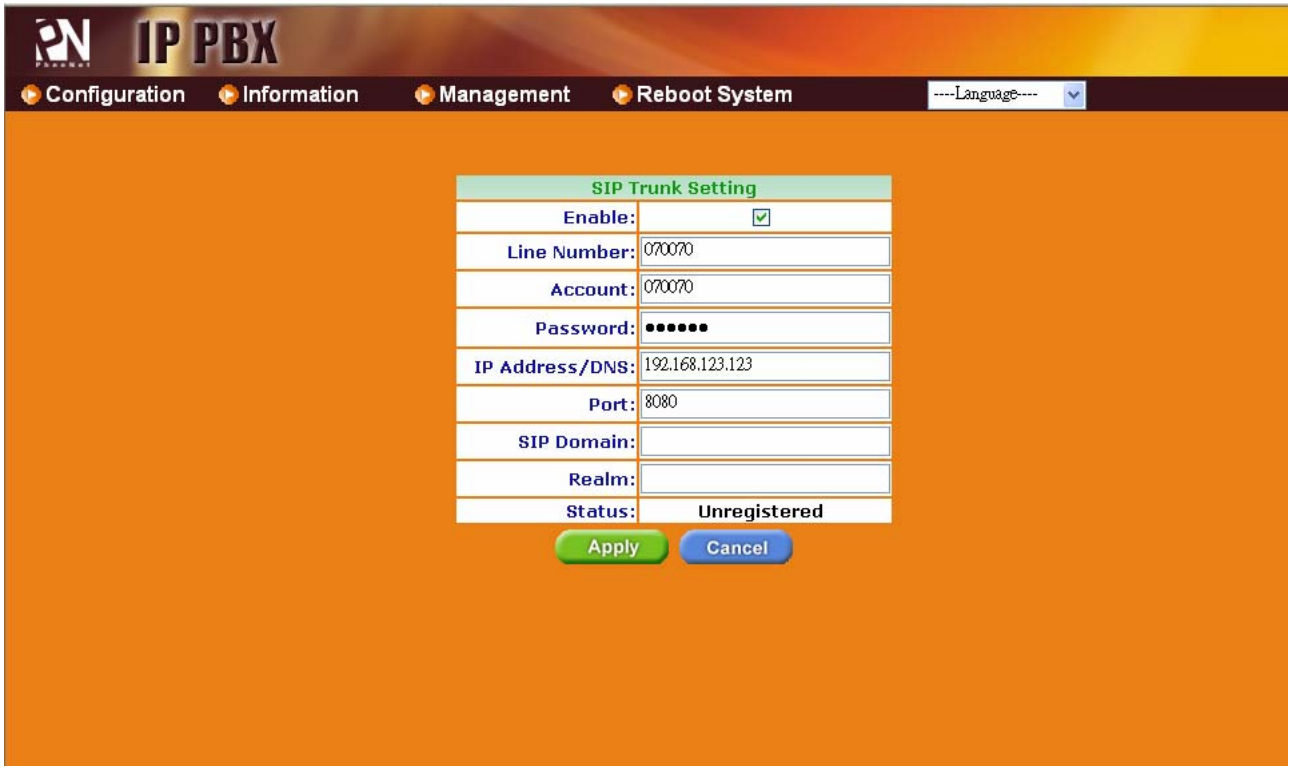
Enter **Configuration→SIP Trunk-Add New** to configure IPBX-011 / IPBX-011CF register to ITSP.

ITSP will provide related account information for IPBX-011 / IPBX-011CF to register. Please input the data here.

Example 1: Disable SIP Trunk



Example 2: Enable SIP Trunk



- **Enable:** Check to enable this SIP Trunk.
- **Line Number:** Line Number for registering to ITSP.
- **Account:** Account Name/ ID for registering to ITSP.
- **Password:** Account Password for registering to ITSP.
- **IP Address/DNS:** Enter IP or domain name of ITSP server.
- **Port:** Port number of ITSP server for registering.
- **SIP Domain:** You can change the SIP domain here if necessary. Some SIP platform will confirm SIP domain which locate in the From header. Modify this field will let IPBX register to SIP Trunk successfully.
- **Realm:** Realm of ITSP or another IPBX-011 / IPBX-011CF.

  Note:

  - When a call was sent form IPBX-011 / IPBX-011CF to a remote SIP-Trunk, the SIP-Trunk may attempt to authenticate the “call”. So IPBX-011 / IPBX-011CF should reply the correct Account ID and Password. How does the IPBX-011 / IPBX-011CF know which ID and Password it should send? When the call is going to SIP-Trunk via IPBX-011 / IPBX-011CF, the SIP-Trunk may reply a 407 code, which will contain a parameter called “Realm” for authentication, IPBX-011 / IPBX-011CF will re-send the call again and contains correct ID and Password based on the Realm. So the Realm should be unique. For more information about Realm, please contact with your ITSP.

- If you have multiple IPBX-011 / IPBX-011CF, you may hope those IPBX-011 / IPBX-011CF could call to each other. You should set the Extension to let those IPBX-011 / IPBX-011CF can register to each other, and you should also confirm the [Realm] in the page of **Configuration→ IP PBX. For more information, please refer to the user manual: CH5.1 Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.**

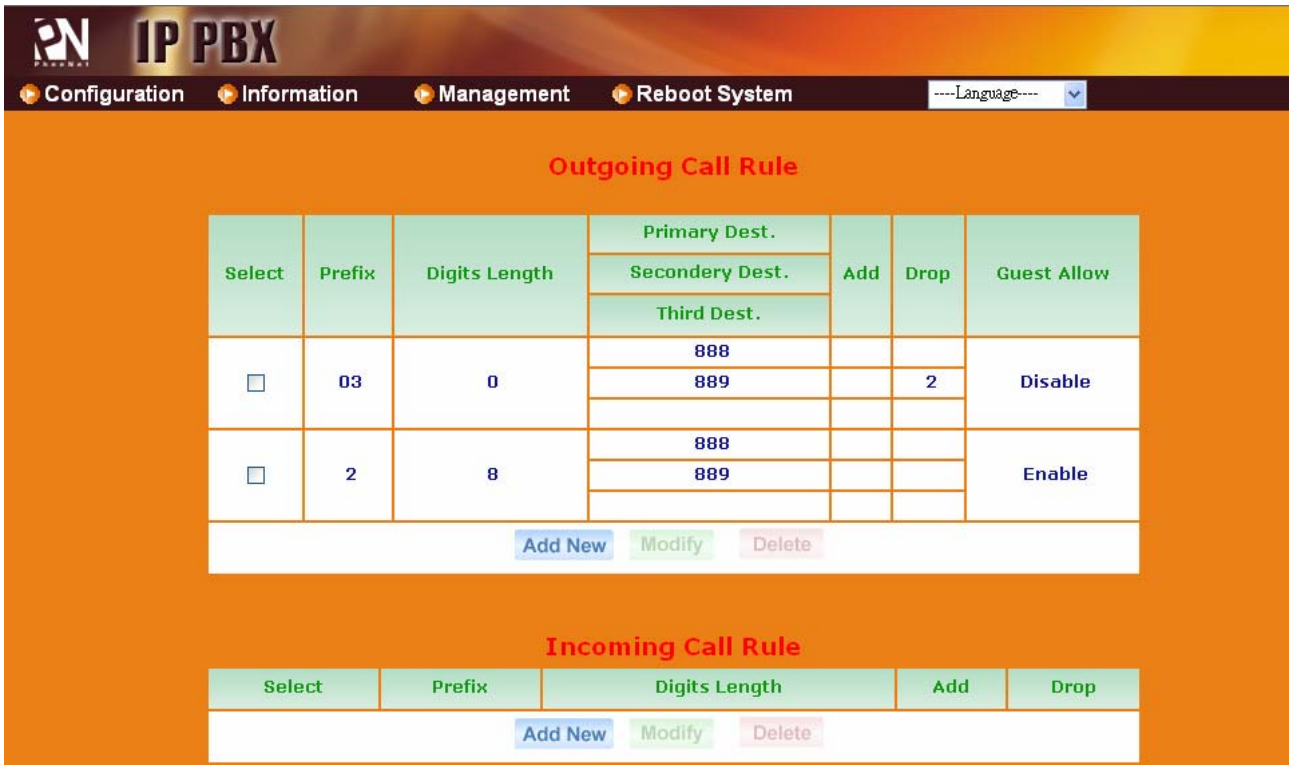
■ **Status:** Once SIP Trunk is configured and enabled, here will show the registration status.

Press Apply to save configuration, or press Cancel to quit configuration.

3.1.6 Routing Table

Routing Table is to set routing rule of IPBX-011 / IPBX-011CF. There are two directions to set rules:
Outgoing Call Rule means from subscriber (Extension or Trunk registered on IPBX-011 / IPBX-011CF) to call out. Incoming Call Rule means call from other non-subscriber device to IPBX-011 / IPBX-011CF.

Enter **Configuration → Routing Table-select direction and press Add New** to set routing table.



3.1.6.1 Outgoing Call Rule

Outgoing Call Rule means from subscriber (Extension or Trunk registered on IPBX-011 / IPBX-011CF) to call out.

Example 1: Routing record with prefix 03 and no limit for Digits Length. Enable Route Password and Drop function.

Example 2: Routing record with prefix 2 and Digits Length is 8. Enable Route Guest Allow and Add function.

- **Prefix:** Set prefix number for routing rule.
- **Digits Length:** Set the digit length of dialed number, if user doesn't want to limit the length, please set this parameter as 0. The maximum length is 20.

Note:

- **If you set the Digits Length as a specific value, such as 10, the dialed number digits length should full match to 10**, or you can set the Digits Length to 0 to ignore the digits length.

- **Primary/Secondary/Third:** User can set three priorities for each routing rule, if IPBX-011 / IPBX-011CF fails to route to primary destination three times, it will try to route to secondary or third destination.
- **Destination:** Here you can find some destination (Trunk) for choosing. You can define the destination for the prefix route.

  Note:

  - **Before setting the Routing Table, you should set the Trunk info in the Trunk page first. So that this field will contain the Trunk ID for choosing.**
  - If the Trunk was setting to Dynamic in the Host field, but it doesn't register on IPBX-011 / IPBX-011CF, IPBX-011 / IPBX-011CF will skip this "priority" and route call to next priority immediately without trying. If the Trunk was setting to Address in the Host field, but the Address is not reachable, IPBX-011 / IPBX-011CF will try three times then route call to next priority.

- **Add:** To add assigned number. For example, you set 02 here and the called number is 03123, the IPBX-011 / IPBX-011CF will add 02 then send 0203123 as the called number.
- **Drop:** To drop **specified length of number**. For example, you set 2 here and the called number is 03123, the IPBX-011 / IPBX-011CF will drop 03 then send 123 as outgoing number.

  Note:

  - If you set both of the Drop and Add, IPBX-011 / IPBX-011CF will Drop first then Add.

Example:

If user set prefix as 002, digits length as 12, Primary destination as 888, Drop as 3, and Add as 0.

When caller called 002912345678, the prefix is 002; length is 12, so this call matches the routing rule.

002912345678→912345678(Drop 3 digits) →0912345678(Add 0)

Finally, IPBX-011 / IPBX-011CF will send 0912345678 to Trunk ID 888.

- **Route Password:** Set password here so the IPBX-011 / IPBX-011CF will request password before sending the call to Trunk.
- **Guest Allow:** Enable Guest Allow will allow user who is not your subscriber (Extension)

to use such routing record. User can reach the Auto attendant (The default Auto Attendant of IPBX-011 / IPBX-011CF is **999) first then send call to Destination (Trunk), if you enable Guest Allow. If you disable Guest Allow, only the Extension can use this Routing record.

Note:

- For more information, please refer to the user manual: **CH5.1 Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.**

- **Fixed Outgoing Call Rule:** IPBX-011 / IPBX-011CF will confirm the Fixed Trunk ID if you enable Fixed Outgoing Call Rule. That means the IPBX will route the call to a fixed Trunk if you enable this feature. For example, you set Fixed Trunk ID for extension 101 to 888. And you enable Fixed Outgoing call Rule for a certain route record, such as 8 with length 10. When 101 call a number 8xxxxxxxxx, the IPBX will route this call to 888 no matter you set what's the Primary Destination for such route record.

  Note:

  - For more information about Fixed Trunk ID, please refer to the user manual: **CH3.1.2 Extension**

- **Route Level:** You can define the Route Level for such route record. For example, you define a route record with prefix 0 and the Route Level to R3. That means only the subscriber with DialPlan [ext+R123] and [ext+allroutes] can use such record due to only these two DialPlan contain the Route Level of R3.

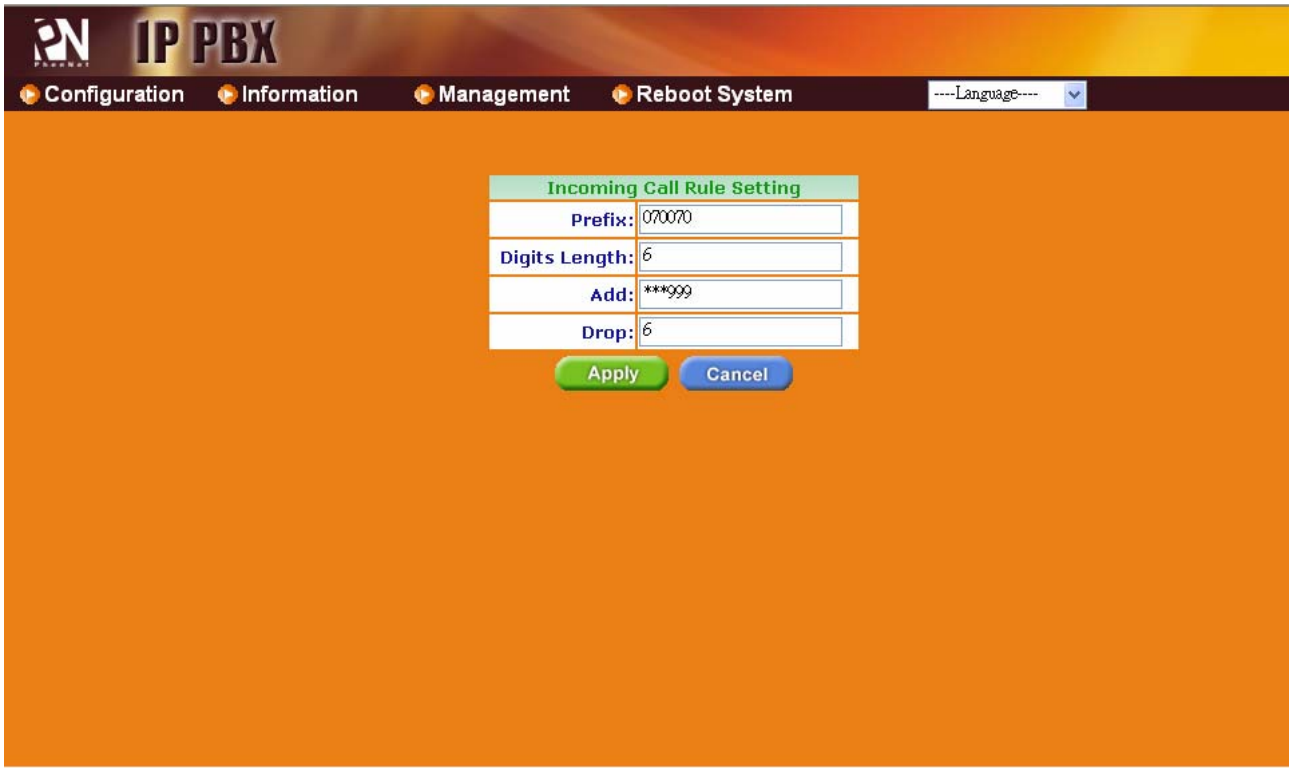
Press Apply to save configuration, or press Cancel to quit configuration.

3.1.6.2 Incoming Call Rule

Incoming Call Rule means call from other non-subscriber device to IPBX-011 / IPBX-011CF.

For example, you set the IPBX-011 / IPBX-011CF to register an ISTP as a SIP Trunk, so your IPBX-011 / IPBX-011CF could be as an "Extension" of ITSP. The other subscriber of ITSP could call to IPBX-011 / IPBX-011CF by the registered line number, when the IPBX-011 / IPBX-011CF got an incoming call, which is not its own subscriber, what will the IPBX-011 / IPBX-011CF do? The IPBX-011 / IPBX-011CF will perform the following example based on the "Incoming Call Rule".

The following example means the IPBX-011 / IPBX-011CF got a called number 070070, which was sending from a non-subscriber of IPBX-011 / IPBX-011CF, IPBX-011 / IPBX-011CF will drop 6 digits then add **999 as the destination number. **999 is the default number of auto attendant. So the caller will hear greeting because the called number will be routed to auto attendant.



- **Prefix:** Set prefix number for routing rule.
- **Digits Length:** Set the length of dialed number, if user doesn't want to limit the length, please set this parameter as 0. The maximum length is 20.

  Note:
  - **If you set the Digits Length as a specific value, such as 10, the dialed number should full match to 10**, or you can set the Digits Length to 0 to ignore the digits length.
  - If the called number from another non-subscriber is equal to Prefix, you should set the Digits Length as a specific value.
  - If the called number is not equal to Prefix, you can set the Digits Length as a specific value or 0 to ignore Digits Length.

- **Add:** To add assigned number. For example, you set **999 here and you do not set Drop. If the called number is 070070101, the IPBX-011 / IPBX-011CF will add **999 then send **999070070101 as the called number.
- **Drop:** To drop **specified length of number**. For example, you set 6 here and you do not set Add. If the called number is 070070101, the IPBX-011 / IPBX-011CF will drop 070070 then send 101 as called number.

  Note:
  - If you set both of the Drop and Add, IPBX-011 / IPBX-011CF will Drop first then Add. For example, the IPBX-011 / IPBX-011CF got a called number 070070, which was sending from a non-subscriber of IPBX-011 / IPBX-011CF, IPBX-011 / IPBX-011CF will drop 6 digits then add **999 as the destination number. **999 is

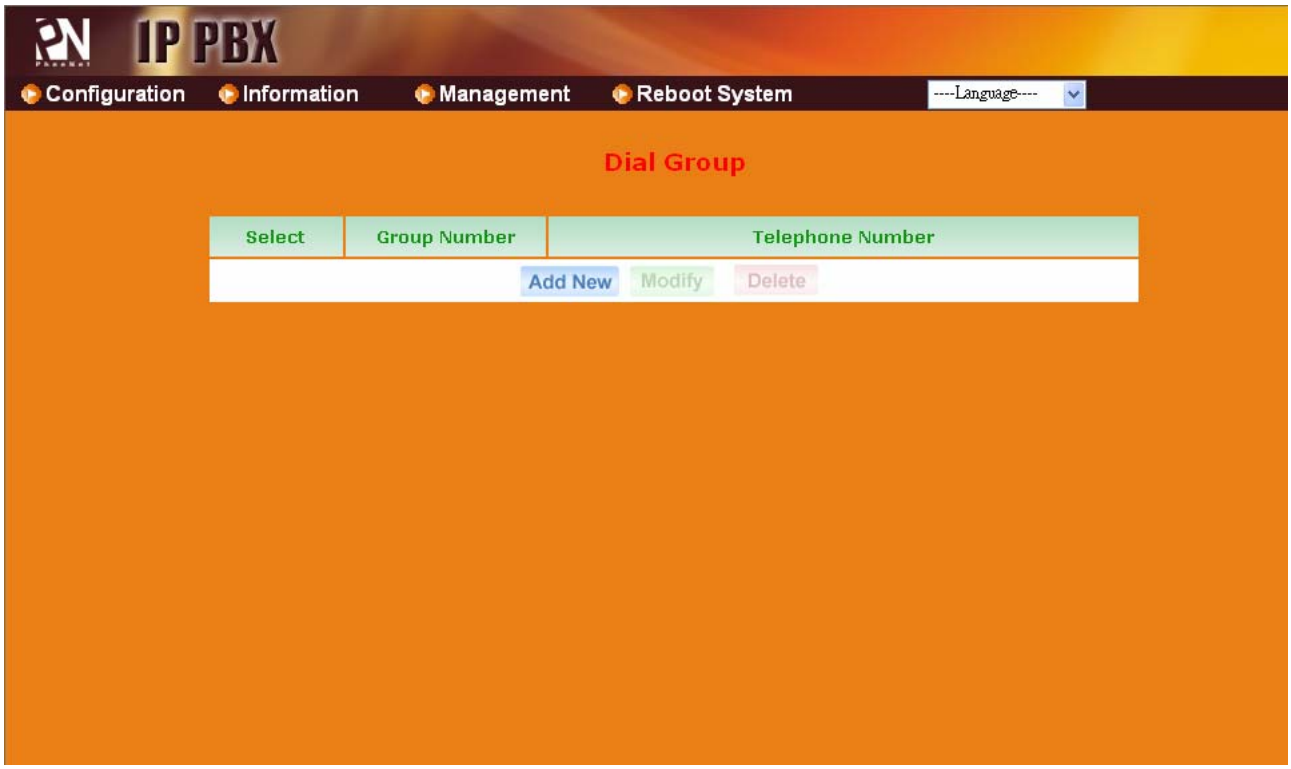
the default number of auto attendant. So the caller will hear greeting because the called number will be routed to auto attendant.

Press Apply to save configuration, or press Cancel to quit configuration.

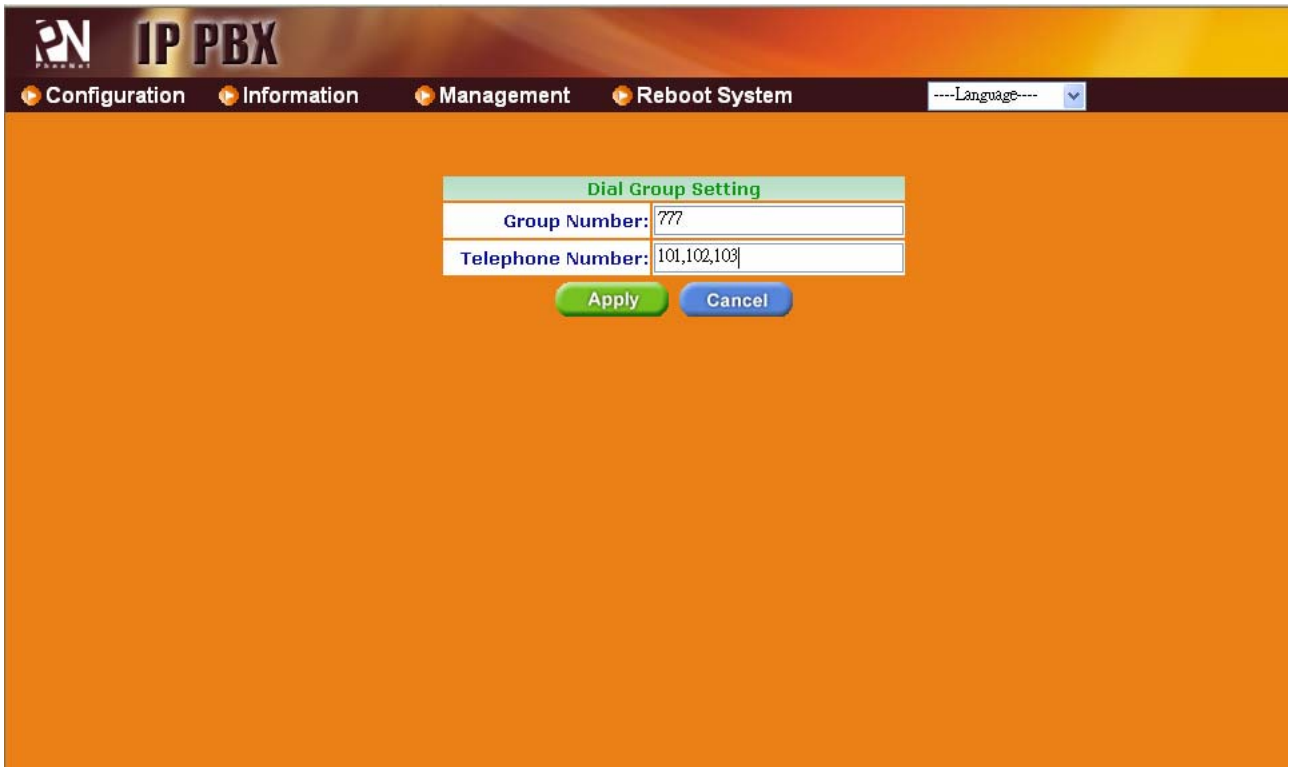
3.1.7 Dial Group

Dial Group is used to set the [group dialing], you can just input a group number and set specific members to join the group. Caller can dial the group number and **all of the members will ring.**

Enter **Configuration→ Dial Group and press Add New** to set Dial Group. Or Modify to configure the specified Dial Group. Press Delete will delete the specified Dial Group.



Enter **Configuration→ Dial Group and press Add New→ Press Apply** to configure Dial Group.



- **Group Number:** Input a specific Group Number here.

  Note:

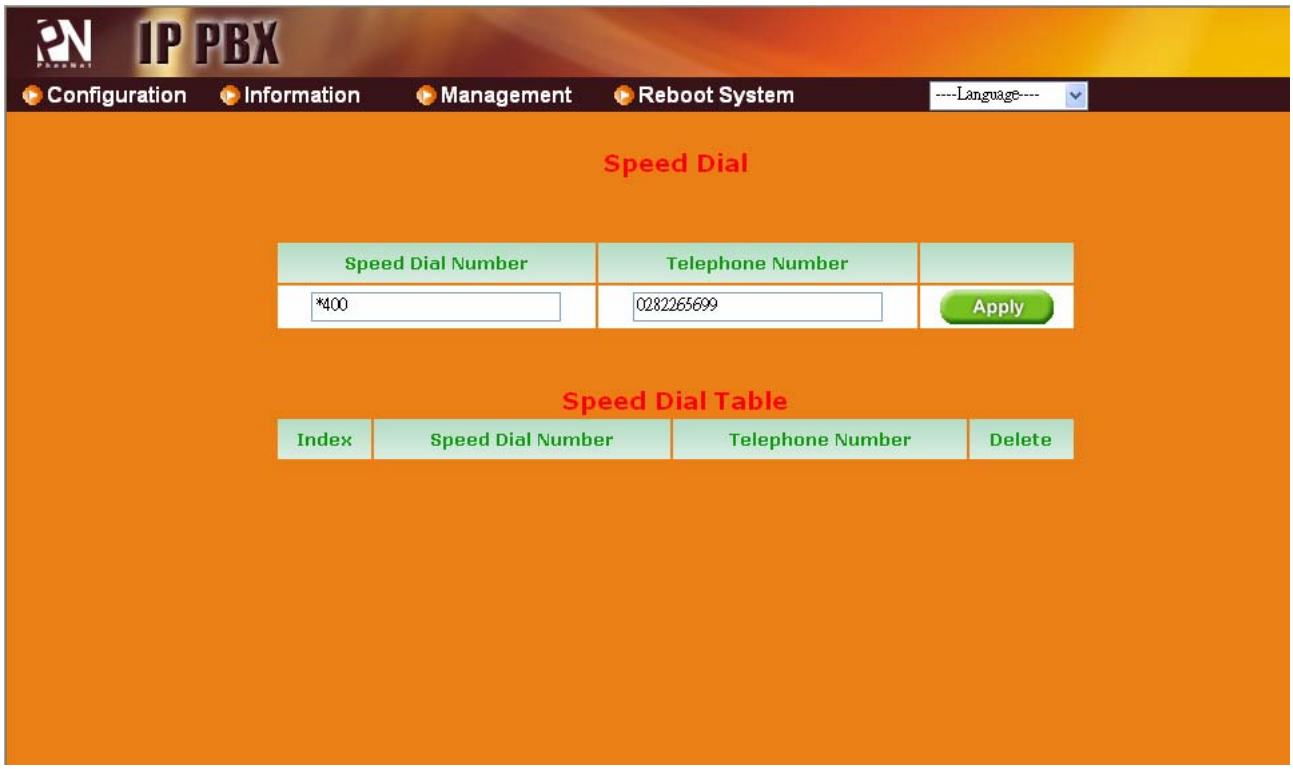
  - The Group number should NOT be the same with Extension, Trunk Number, and Speed Dial Number. All of the Numbers should be unique for IPBX-011 / IPBX-011CF system.

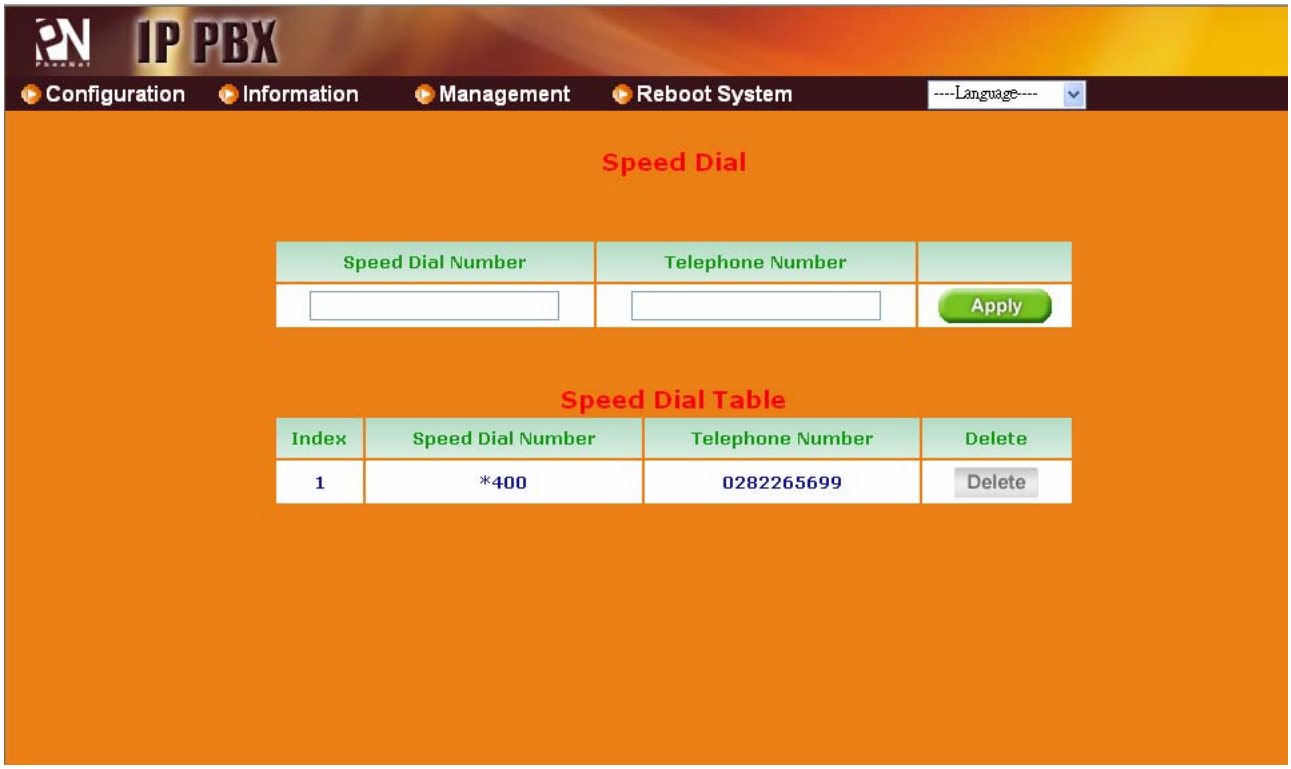
- **Telephone Number:** Set which members to join this Dial Group. You can input multiple members by a “comma”, such as [101,102,103]

3.1.8 Speed Dial

SpeedDial Table is used to set the Speed Dial function; you can just input a SpeedDial Number and set the destination number to Telephone Number field. Subscriber can just dial to the SpeedDial number and IPBX-011 / IPBX-011CF will switch the call to Telephone Number then call out.

Enter **Configuration → Speed Dial** to add Speed Dial record then press **Apply**.





- **SpeedDial Number:** You can input a specified SpeedDial Number here.

  Note:

  - The SpeedDial Number should not be the same with Extension, Trunk Number, and Group Number. All of the Numbers should be unique for IPBX-011 /

IPBX-011CF system.

- If you want to modify a current SpeedDial record, you should delete the current record first and add another new one.

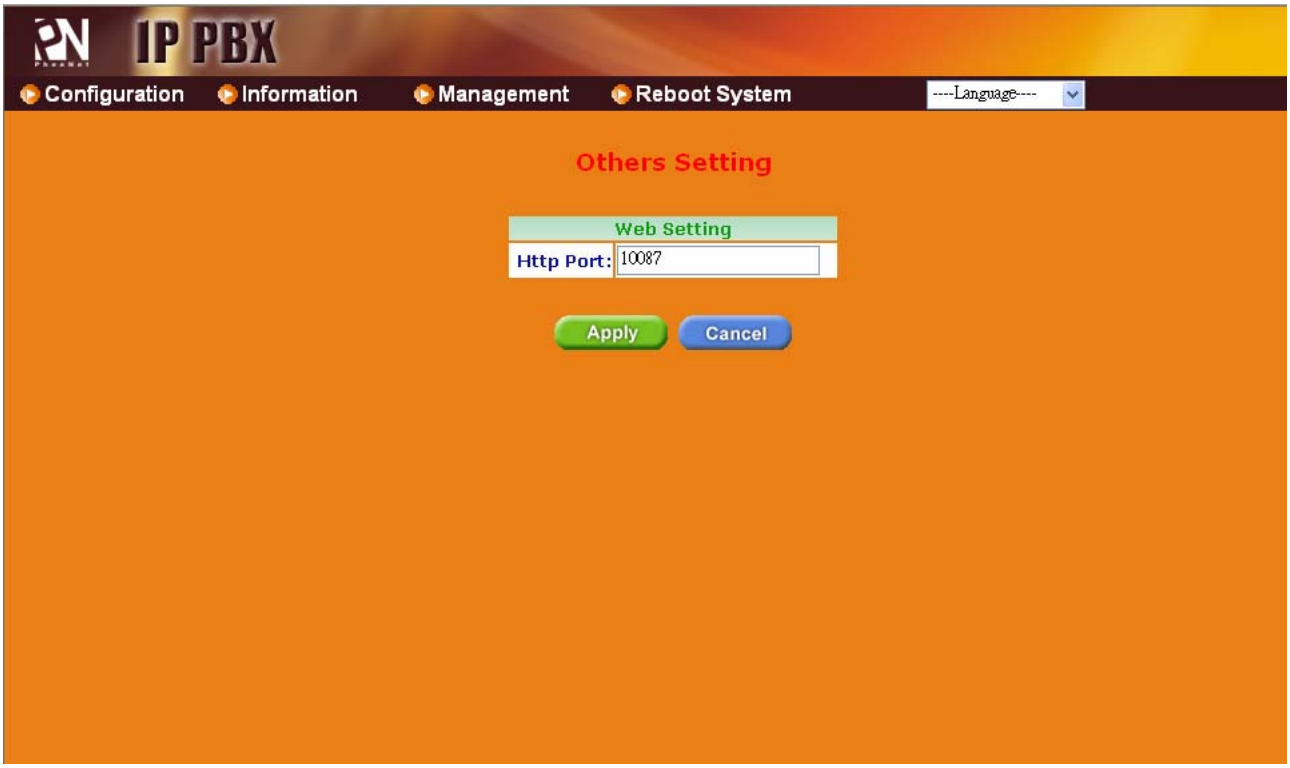
Telephone Number: Set the destination number for the Speed Dial.

Example:

User set SpeedDial number as *400 and Telephone Number as 0282265699. When caller called *400, IPBX-011 / IPBX-011CF will call to 0282265699 as destination number.

3.1.9 Other Setting

Enter **Configuration** → **Other Setting** to configure the other setting.



3.1.9.1 Web Setting

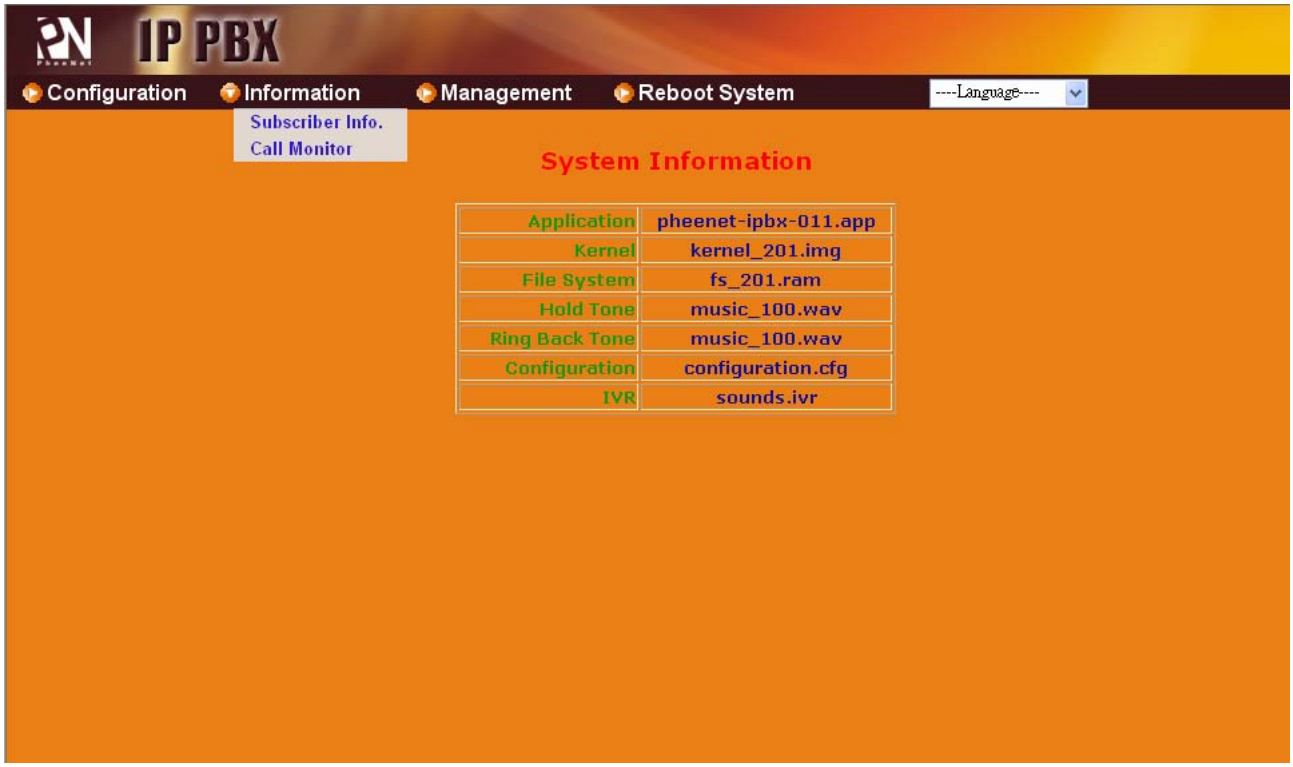
- **Http Port:** You can change the Http port for IPBX-011 / IPBX-011CF. Default is 10087.

Note:

- After Changing the Http port, you should reboot your IPBX-011 / IPBX-011CF manually to activate Http Port setting.

3.2 Information

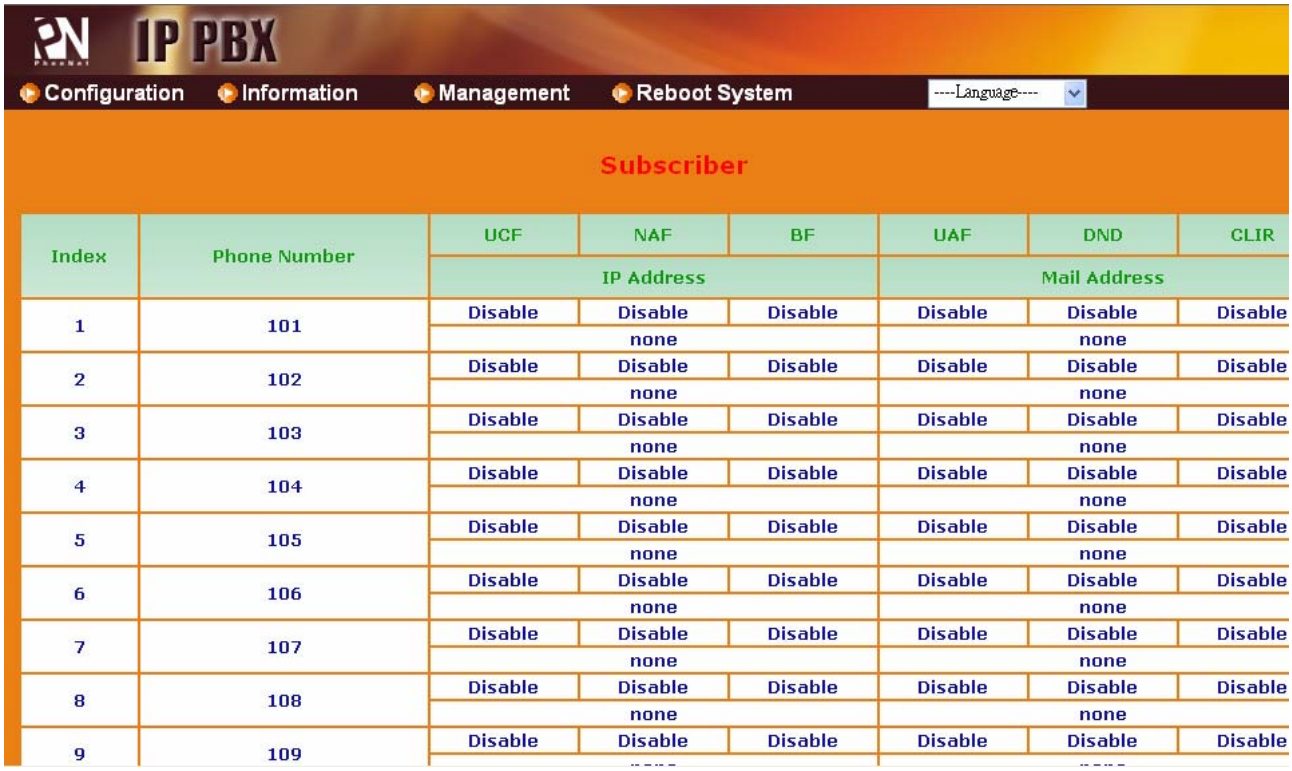
User can check some information of IPBX-011 / IPBX-011CF here.



3.2.1 Subscriber

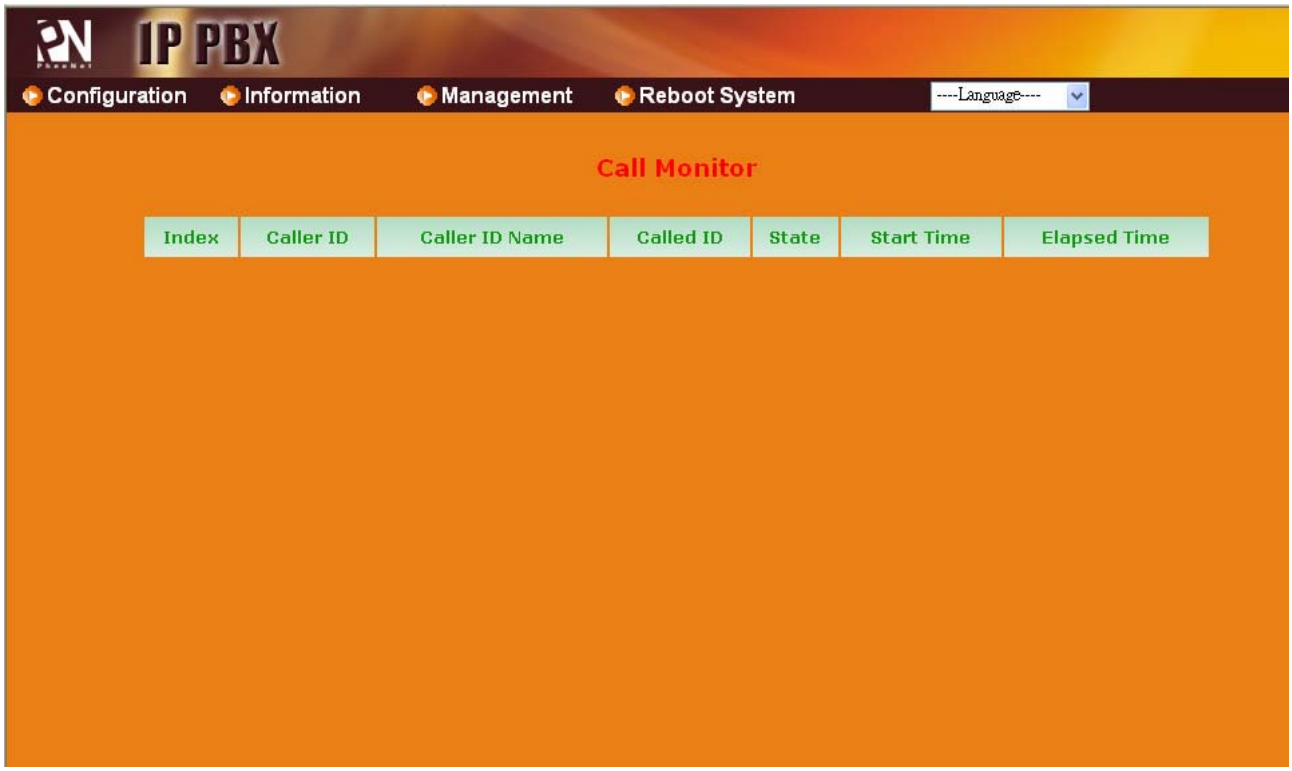
Enter **Information → Subscriber** to check information of Subscribers. You can check Phone Number, IP Address, Transversal and Mail Address…,etc. for Extension and Trunk here. If subscriber registered on IPBX-011 / IPBX-011CF, the IP Address will show up, on the other hand, if the subscriber doesn't register successfully on IPBX-011, the IP Address will not be displayed.

Here you will also find some other "Feature information" for subscribers. Where [UCF] means [Unconditional Forward means [Caller Line Identification Restriction].], [NAF] means [No Answer Forward], [BF] means [Busy Forward], [UAF] means [Unavailable Forward], [DND] means [Do Not Disturb] and [CLIR] means [Caller Line Identification Restriction].


IP PBX
Configuration
Information
Management
Reboot System
----Language----
Subscriber
Index
Phone Number
UCF
NAF
BF
UAF
DND
CLIR
IP Address
Mail Address
1 101 Disable Disable Disable Disable Disable Disable none none
2 102 Disable Disable Disable Disable Disable Disable none none
3 103 Disable Disable Disable Disable Disable Disable none none
4 104 Disable Disable Disable Disable Disable Disable none none
5 105 Disable Disable Disable Disable Disable Disable none none
6 106 Disable Disable Disable Disable Disable Disable none none
7 107 Disable Disable Disable Disable Disable Disable none none
8 108 Disable Disable Disable Disable Disable Disable none none
9 109 Disable Disable Disable Disable Disable Disable

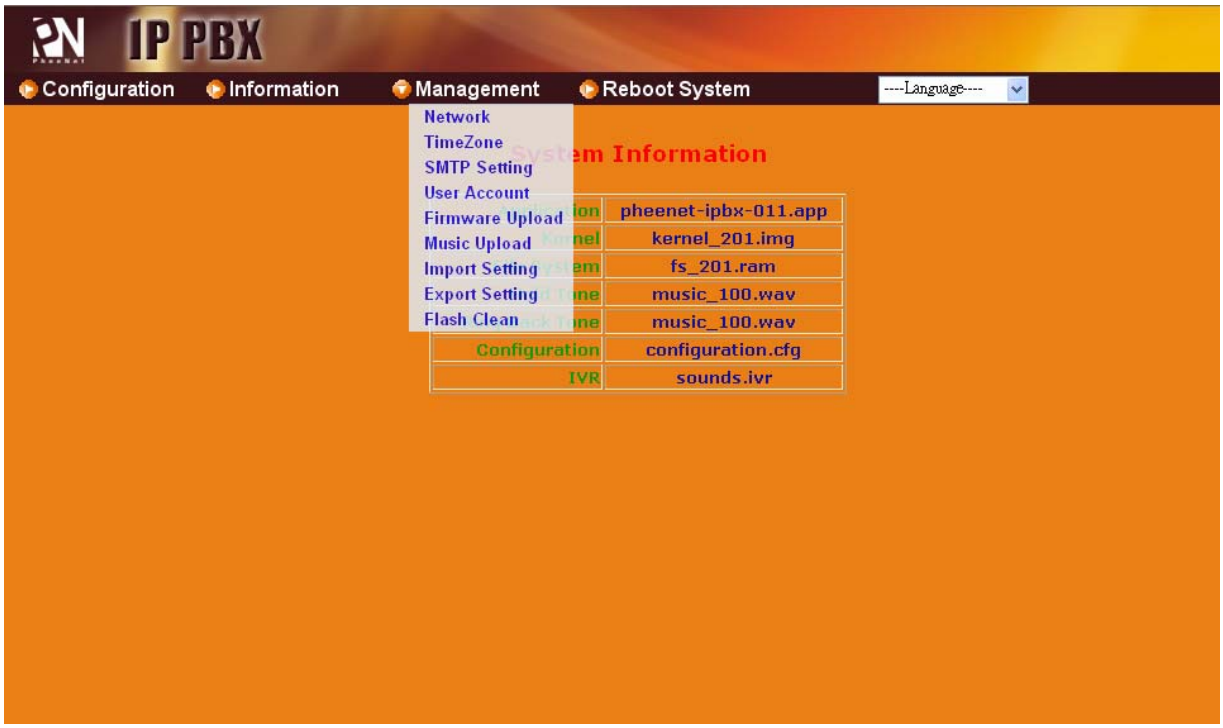
3.2.2 Call Monitor

Enter **Information → Monitor** to check the call status.



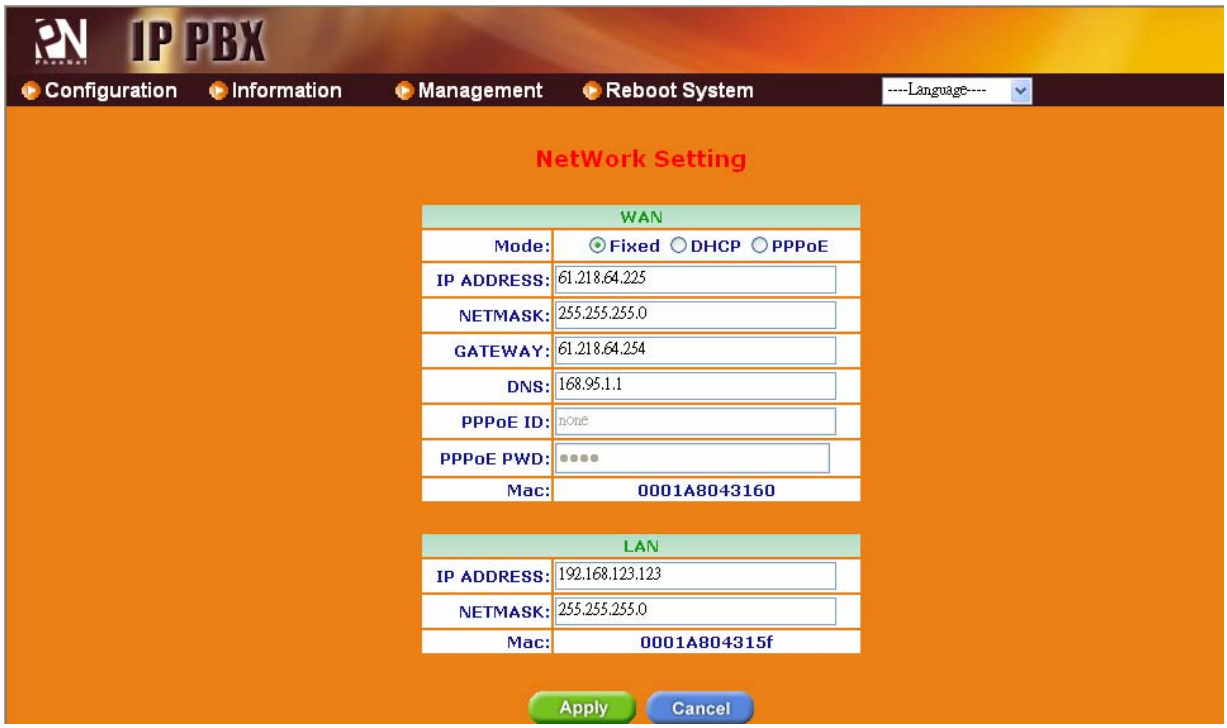
3.3 Management

User can execute IPBX-011 / IPBX-011CF system configuration and management under this category.



3.3.1 Network

Enter **Management**→ Network to configure WAN and LAN IP.



- WAN
  - Mode: Select IPBX-011 / IPBX-011CF WAN port network mode to be Fixed IP, DHCP or PPPoE.

- IP Address/NETMASK/GATEWAY: If user has set IPBX-011 / IPBX-011CF to be fixed IP mode. User need to input IP address/Subnet Mask/ Default Gateway.
- DNS: Input DNS address.
- PPPoE ID: If you choose the Mode to PPPoE, you should also input the PPPoE ID here for authentication.
- PPPoE PWD: If you choose the Mode to PPPoE, you should also input the PPPoE password here for authentication.
- Mac: Mac address of IPBX-011 / IPBX-011CF WAN port. The Mac address cannot be modified.

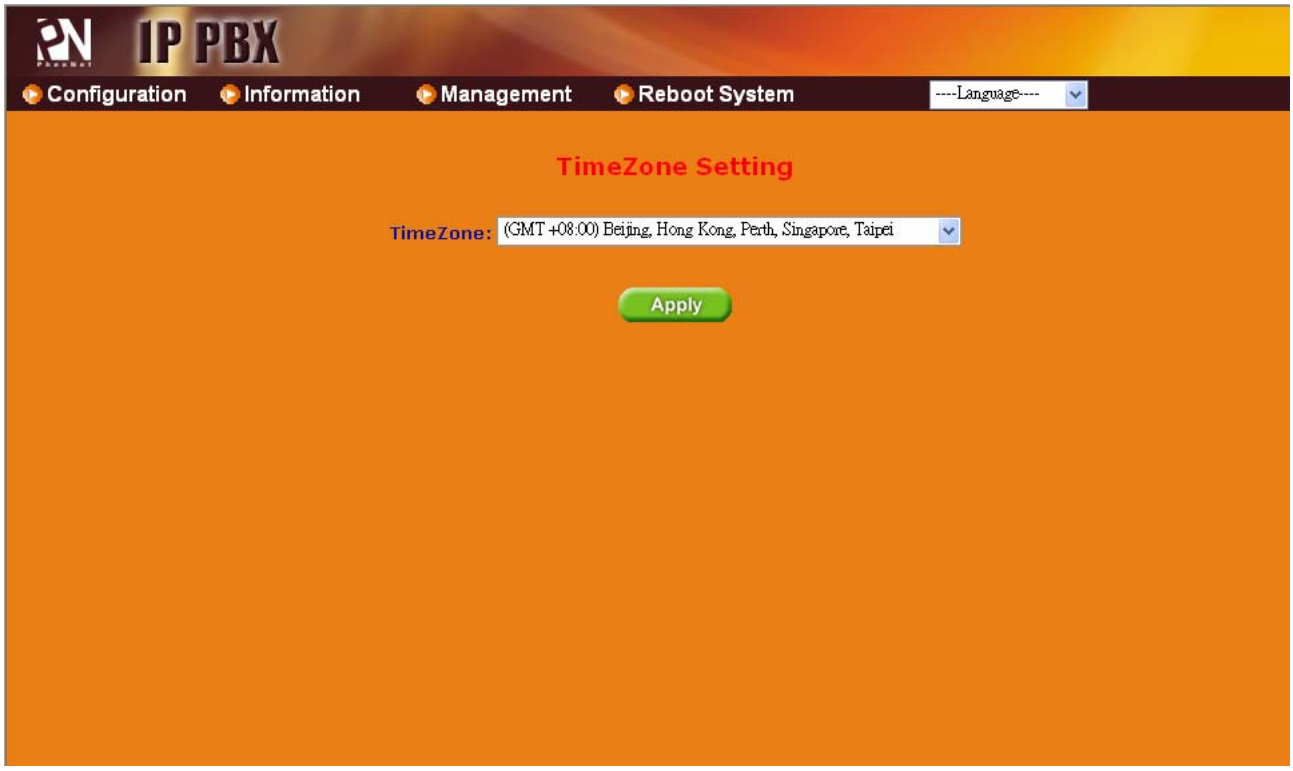
■ LAN

- IP Address: Input IP address for LAN port of IPBX-011 / IPBX-011CF.
- NETMASK: Input Subnet Mask for LAN port of IPBX-011 / IPBX-011CF.
- Mac: Mac address of IPBX-011 / IPBX-011CF LAN port. The Mac address cannot be modified.

Press Apply to save configuration, or press Cancel to quit configuration.

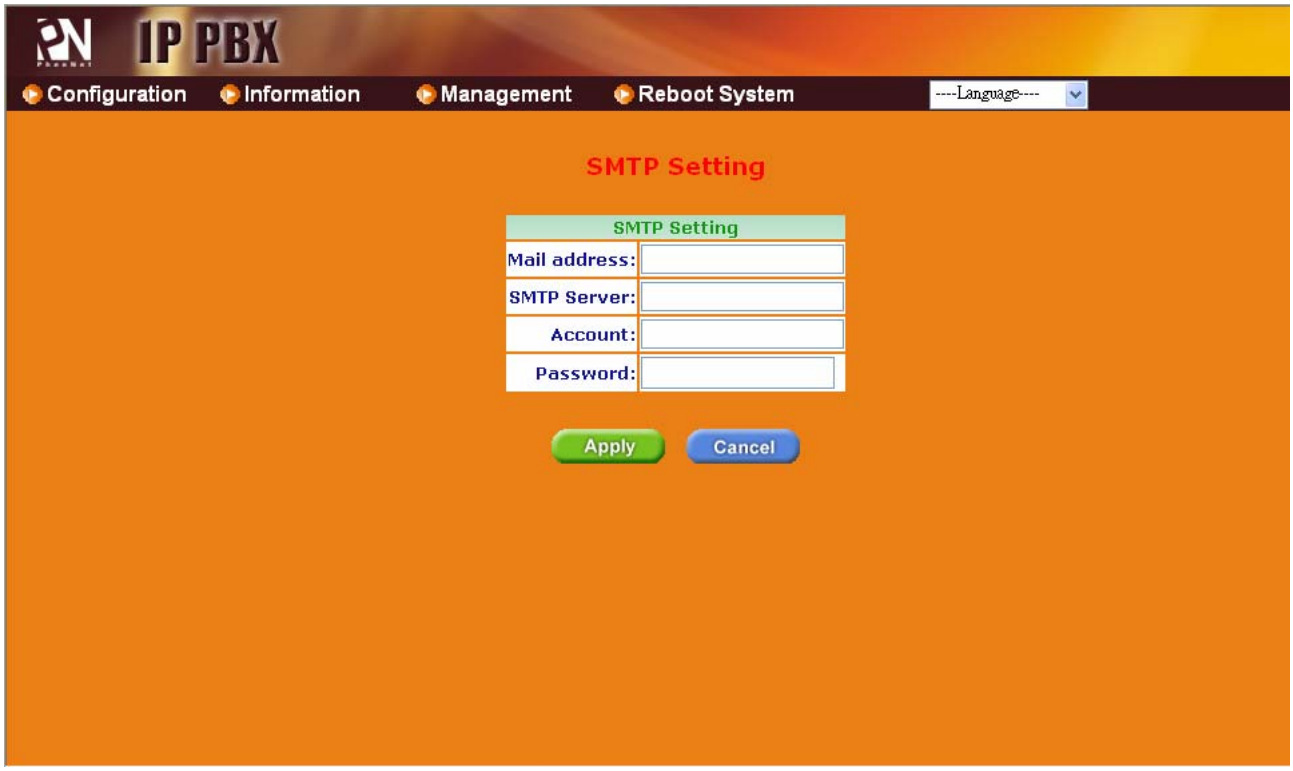
3.3.2 TimeZone

Enter Management → **TimeZone** to select correct Time Zone for IPBX-011 / IPBX-011CF, this time will affect CDR and voice mail time display.



3.3.3 SMTP Setting

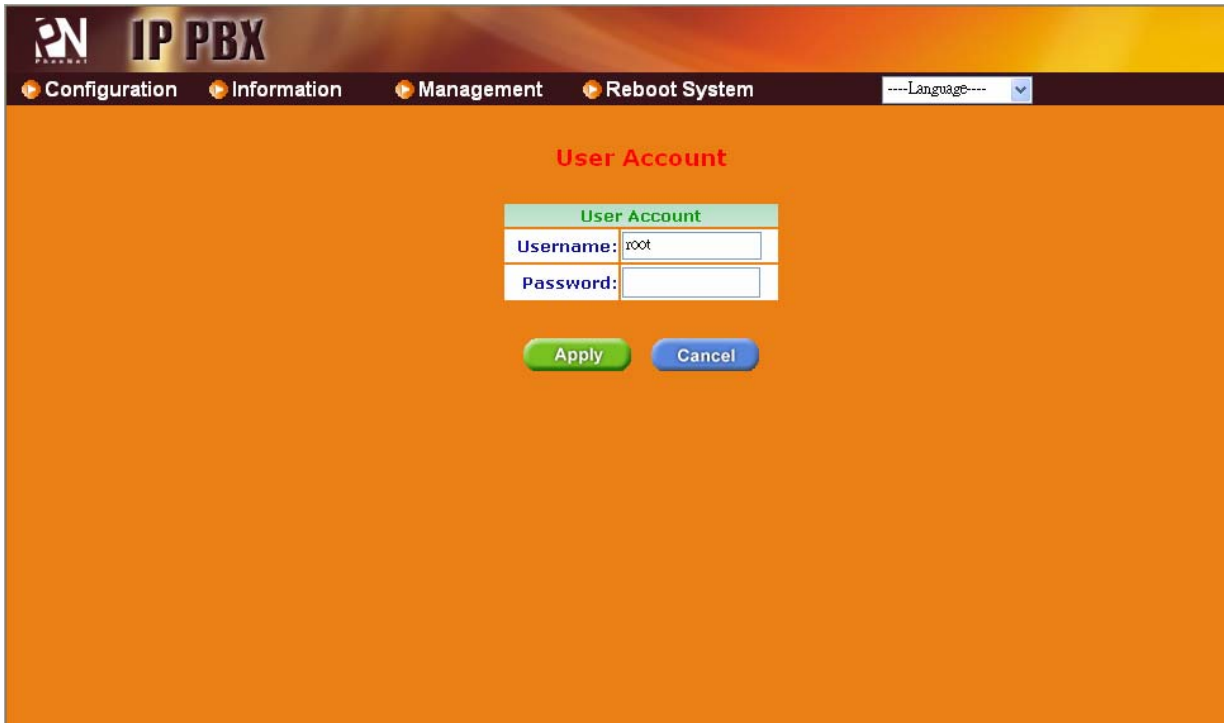
IPBX-011 / IPBX-011CF can support Voice Mail to e-mail. Before activate this feature, you should give the IPBX-011 / IPBX-011CF an e-mail account and set the SMTP for IPBX-011 / IPBX-011CF, so that the IPBX-011 / IPBX-011CF has the ability to send the leaved message to the subscriber's mail box.



- **Mail Address:** Input the mail address here for IPBX-011 / IPBX-011CF.
- **SMTP server:** Input the SMTP server address.
- **Account:** If your SMTP server needs the user account for Authentication, please input user account here.
- **Password:** If your SMTP server needs the password for Authentication, please input password here.

3.3.4 User Account

Enter **Management → User Account** User can set login User name and Password here. System only one set of user.

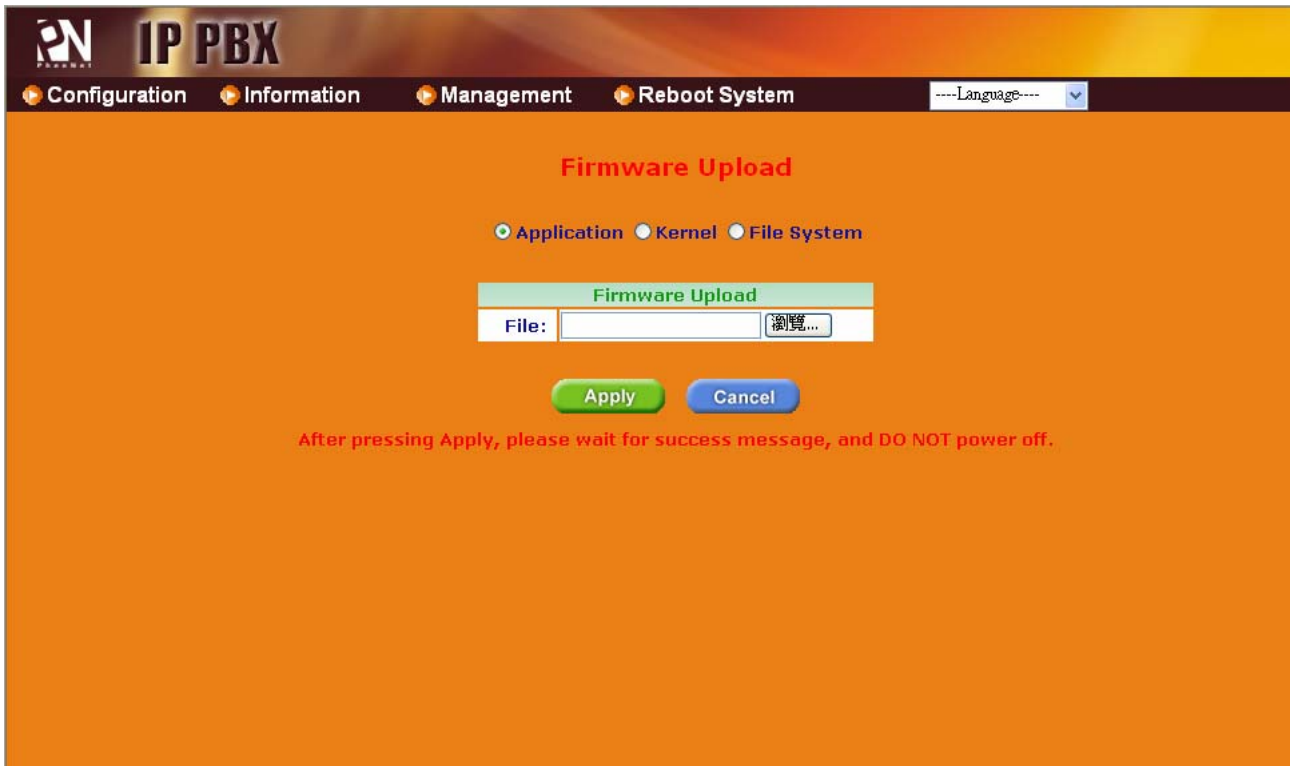


3.3.5 Firmware Upload

Enter **Management → Firmware Upload → Choose the Firmware options (Application, Kernel and File System) → Press Browse and select firmware file → Press Apply** to start firmware upload.

Note:

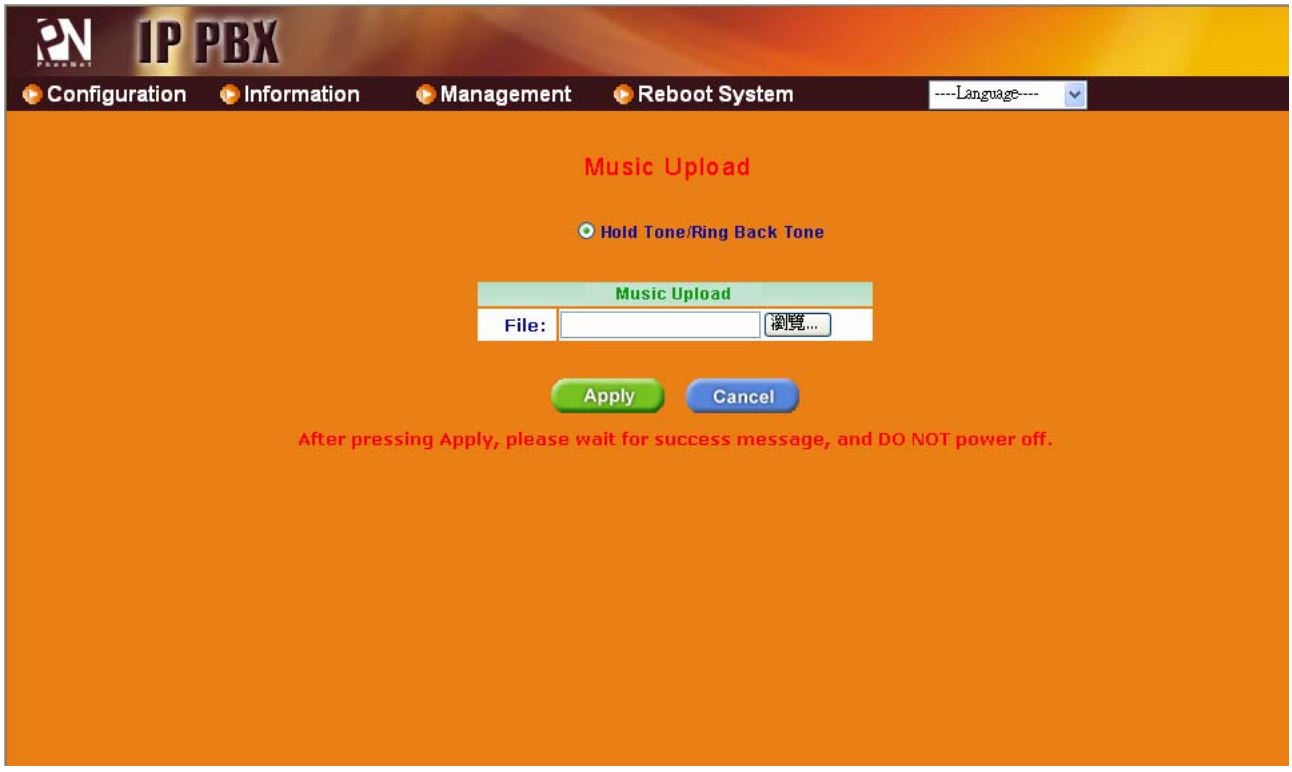
- Normally, you just need to upgrade the Application but in some situation you may need to also upgrade the Kernel or File System. For more information, please refer to the release note of IPBX-011 / IPBX-011CF.
- After pressing Apply, please wait for success message, and DO NOT power off.
- After upload succeed, on screen will show success message. Please reboot system to renew system firmware.



3.3.6 Music Upload

User can customize Ring Back Tone (Transferring Tone) by upload new wave file on IPBX-011 / IPBX-011CF. Please record wave file format as **PCM, Channel Mode: Mono, Frequency: 8K, Bit Rate: 16 bit. And the file size must less than 2M.**

Enter **Management → Music Upload → Press Browse…→ select wave file → Press Apply** to upload special Ring Back Tone. After Upload is finished, press Reboot to reboot system to renew Ring Back Tone.



3.3.7 Import Setting

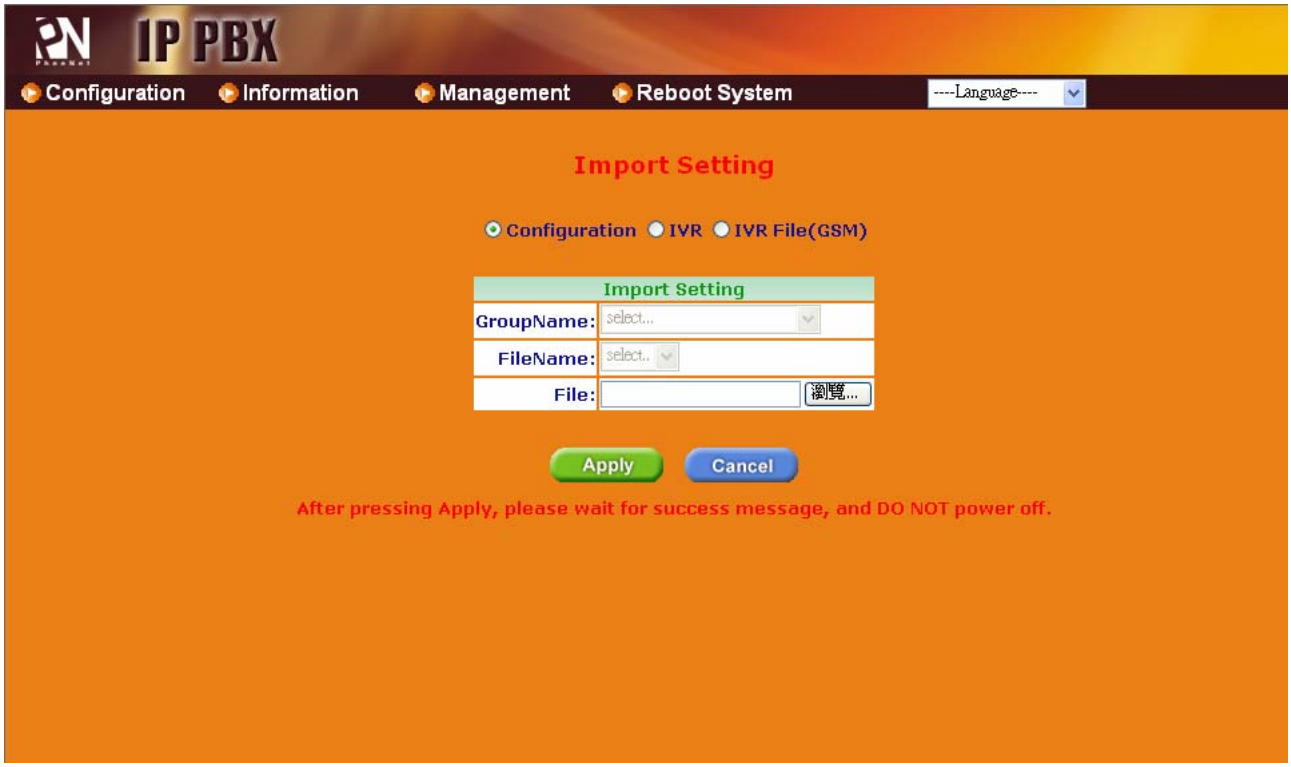
If there is IPBX-011 / IPBX-011CF setting file exported from IPBX-011 / IPBX-011CF, user can import this file and doesn't need to re-configure for IPBX-011 / IPBX-011CF.

Enter **Management → Import Setting → Choose the Import options (Configuration, IVR or IVR File (GSM)) → Press Browse and select setting file → Press Apply** to Import Setting file.

After Import finished, on screen will show related information. **Please reboot system to renew system configuration.**

Note:

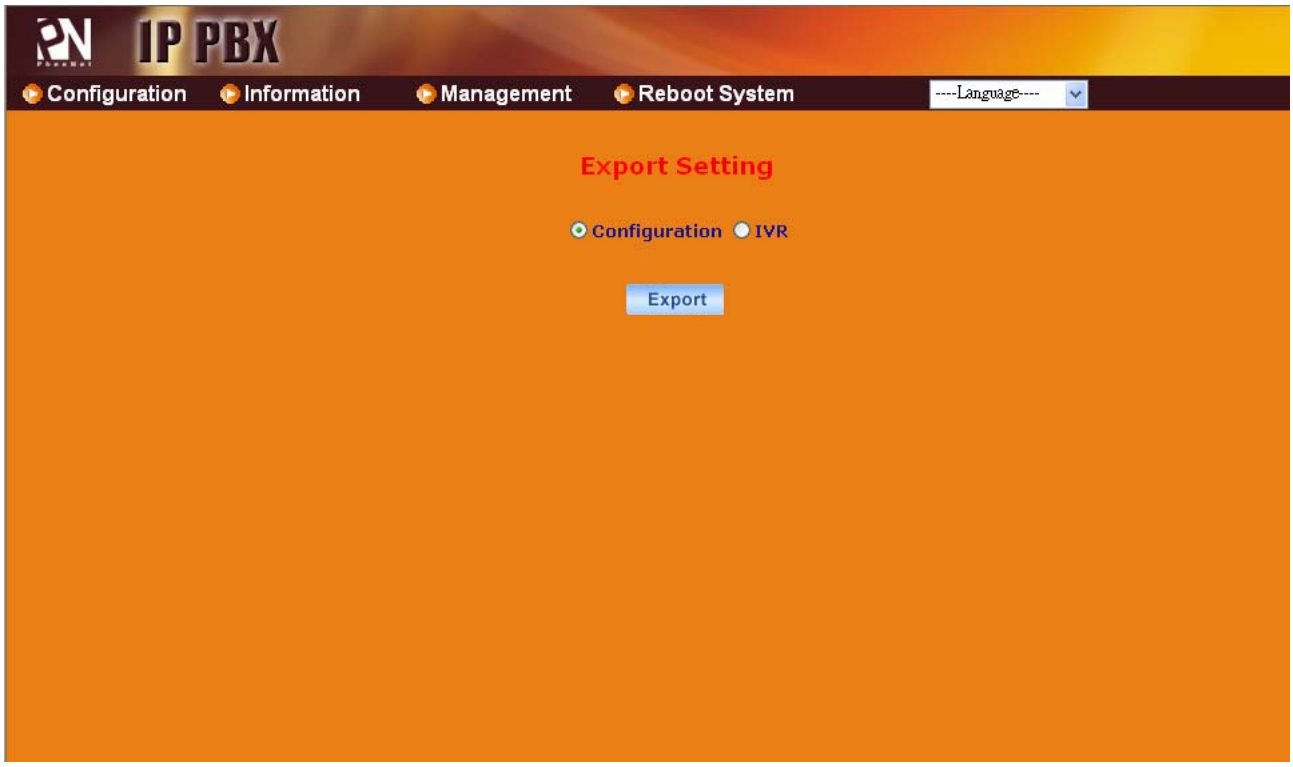
- After pressing Apply, please wait for success message, and DO NOT power off.
- After Import succeed, on screen will show related information. Please reboot system to renew settings.
- You can choose the Configuration or IVR option and import the file to restore the configuration setting, and you can also choose the IVR File option and import a specific IVR files to IPBX-011 / IPBX-011CF.
- If you choose the option to IVR File(GSM). Before import the IVR File to IPBX-011 / IPBX-011CF, you should prepare the gsm file by yourself first. You should choose the Group and select file name, then you can import a specific file with gsm format to IPBX-011 / IPBX-011CF to instead the old one.
- For example, the IVR file of DAY Greeting is in [Group Auto Attendant Sounds Files], and the file name is [greeting-day.gsm], so you should record the IVR file by your pc and switch the format and file name to greeting-day.gsm. And you should choose the correct group and file name to instead the old one.
- For more information about the detail IVR files, please refer to user manual: **CH4.1.3 How to record the other system prompts**



3.3.8 Export Setting

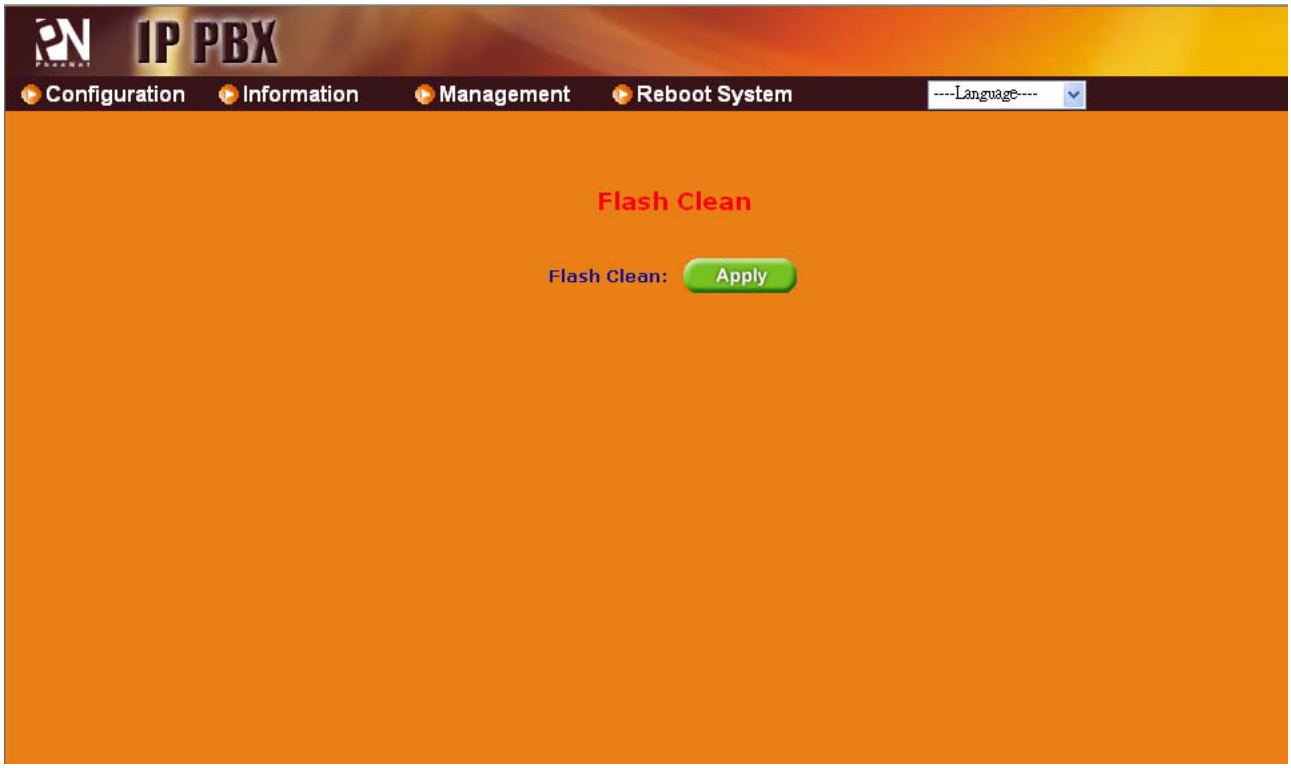
User can export configuration and voice wave files. If there is more than one IPBX-011 / IPBX-011CF need to be configured, user can export configuration of one IPBX-011 / IPBX-011CF, and then import this setting file for the other IPBX-011 / IPBX-011CFs, so that user doesn't need to re-configure for each IPBX-011 / IPBX-011CF.

Enter **Management → Export Setting → Choose the Export options (Configuration or IVR) → Press Export**, wait for system to collect setting-select directory to save setting file.



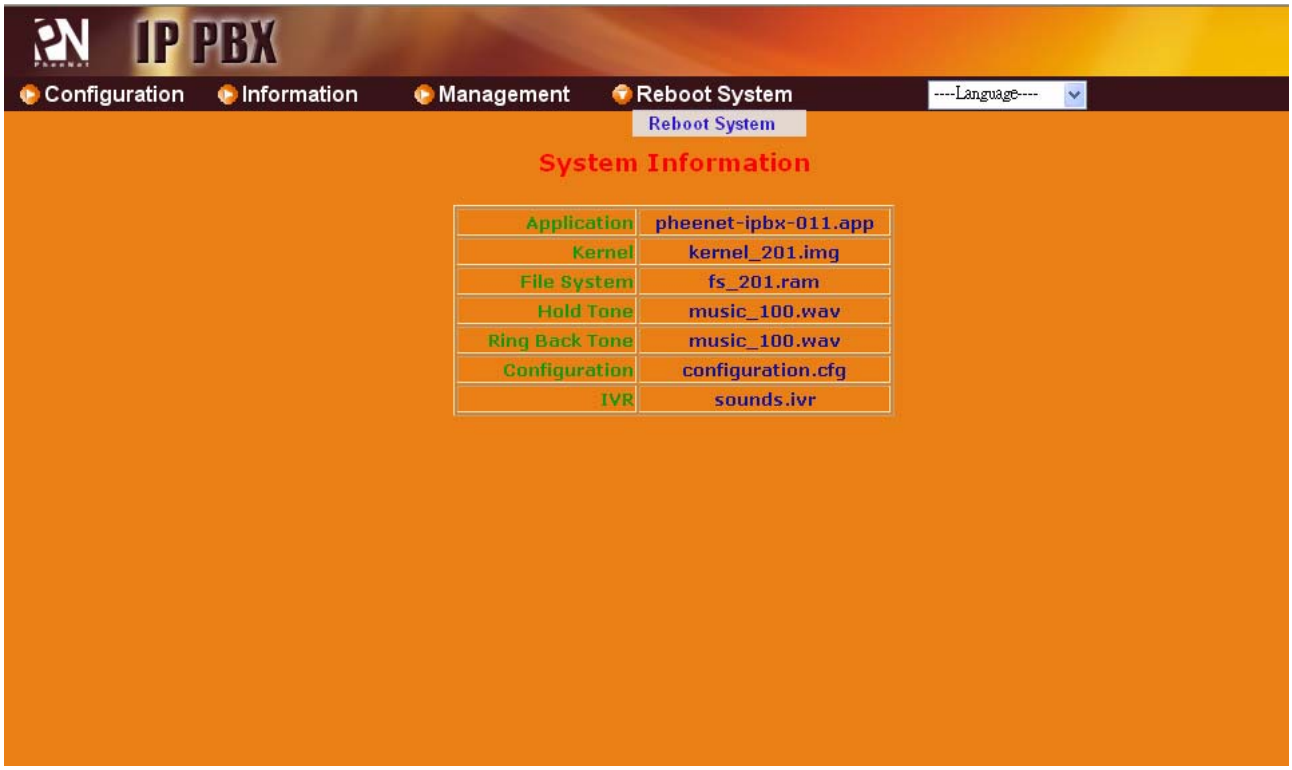
3.3.9 Flash Clean

Enter **Management → Flash Clean→ Press Apply** will clean all configurations of IPBX-011 / IPBX-011CF and reset to factory default value, including Network setting and Web login account. After Flash Clean, IPBX-011 / IPBX-011CF will auto reboot.



3.4 Reboot System

Press Apply to reboot system. Please wait for a few minutes and reload web page again.



CH4. Application Setting

4.1 Customize System prompt

4.1.1 Record Greeting

Use any Extension phone to enter the recording process. The feature code of System Prompt Recording is [*50]. The record procedure of greeting message will be: “Dial to [*50]→ Input password [000]→ dial to access code [**111]→ Start to record greeting-day.gsm”. Greeting will renew immediately after recording.

Note:

- For more information about the feature code of System Prompt Recording, please refer to user manual: **CH1.2 Feature Code.**

4.1.2 Enable Automated Attendant

User has to Enable Trunk (e.g. VG-1440R) hotline function and point to destination number **999 (Number of Automated Attendant for IPBX-011 / IPBX-011CF). Once system has incoming call from PSTN, it will automatically connect to Automated Attendant.

Note:

- All of the Extensions can also dial to **999 to reach Automated Attendant directly.
- For more information, please refer to the CH5. Appendix-Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.

4.1.3 How to record the other System Prompts

User can record the greeting by “Dial to [*50]→ Input password [000]→ dial to access code [**111]” as default. After the tone, start recording then press pound key. So that the caller will hear the new greeting if user call to **999. When the user called to an Extension, which is on the phone, he will also hear an announcement of Extension is busy. How to record a new busy system prompt? The procedure is just like recording new greeting, dialing to access code for recording. And user can also dial to [*50]→ Input password [000]→ dial to access code [***xxxx]” to listen the system prompt, too. You can also record the sound files with GSM format by your PC or other equipment, and choose the specific file name in the page of Import Setting, import the GSM file to instead the old one. For example, you can record the greeting announcement by your PC as a WAV file. And use some tools to switch it to GSM format, name it as greeting-day.gsm. then you can go to “Import Setting” page, choose **IVR File(GSM)** → Choose GroupName to Auto Attendant Sounds Files → Choose FileName to greeting-day.gsm → Upload new file. Below is the detail for system prompts.

GroupName: Digits Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**0000	***0000	0.gsm	zero
**0001	***0001	1.gsm	one
**0002	***0002	2.gsm	two
**0003	***0003	3.gsm	three
**0004	***0004	4.gsm	four
**0005	***0005	5.gsm	five
**0006	***0006	6.gsm	six
**0007	***0007	7.gsm	seven
**0008	***0008	8.gsm	eight
**0009	***0009	9.gsm	nine
**0010	***0010	10.gsm	ten
**0011	***0011	11.gsm	eleven (For IPBX-011CF only)
**0012	***0012	12.gsm	twelve (For IPBX-011CF only)
**0013	***0013	13.gsm	thirteen(For IPBX-011CF only)
**0014	***0014	14.gsm	fourteen (For IPBX-011CF only)
**0015	***0015	15.gsm	fifteen (For IPBX-011CF only)
**0016	***0016	16.gsm	sixteen (For IPBX-011CF only)
**0017	***0017	17.gsm	seventeen (For IPBX-011CF only)
**0018	***0018	18.gsm	eighteen (For IPBX-011CF only)
**0019	***0019	19.gsm	nineteen (For IPBX-011CF only)
**0020	***0020	20.gsm	twenty (For IPBX-011CF only)
**0030	***0030	30.gsm	thirty (For IPBX-011CF only)
**0040	***0040	40.gsm	forty (For IPBX-011CF only)
**0050	***0050	50.gsm	fifty (For IPBX-011CF only)
**0060	***0060	60.gsm	sixty (For IPBX-011CF only)
**0070	***0070	70.gsm	seventy (For IPBX-011CF only)
**0080	***0080	80.gsm	eighty (For IPBX-011CF only)
**0090	***0090	90.gsm	ninety (For IPBX-011CF only)
GroupName: Time & Date Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**0101	***0101	h-1.gsm	first (For IPBX-011CF only)
**0102	***0102	h-2.gsm	second (For IPBX-011CF only)
**0103	***0103	h-3.gsm	third (For IPBX-011CF only)
**0104	***0104	h-4.gsm	fourth (For IPBX-011CF only)

**0105	***0105	h-5.gsm	fifth (For IPBX-011CF only)
**0106	***0106	h-6.gsm	sixth (For IPBX-011CF only)
**0107	***0107	h-7.gsm	seventh (For IPBX-011CF only)
**0108	***0108	h-8.gsm	eighth (For IPBX-011CF only)
**0109	***0109	h-9.gsm	ninth (For IPBX-011CF only)
**0110	***0110	h-10.gsm	tenth (For IPBX-011CF only)
**0111	***0111	h-11.gsm	eleventh (For IPBX-011CF only)
**0112	***0112	h-12.gsm	twelfth (For IPBX-011CF only)
**0113	***0113	h-13.gsm	thirteenth (For IPBX-011CF only)
**0114	***0114	h-14.gsm	fourteenth (For IPBX-011CF only)
**0115	***0115	h-15.gsm	fifteenth (For IPBX-011CF only)
**0116	***0116	h-16.gsm	sixteenth (For IPBX-011CF only)
**0117	***0117	h-17.gsm	seventeenth (For IPBX-011CF only)
**0118	***0118	h-18.gsm	eighteenth (For IPBX-011CF only)
**0119	***0119	h-19.gsm	nineteenth (For IPBX-011CF only)
**0120	***0120	h-20.gsm	twentieth (For IPBX-011CF only)
**0130	***0130	h-30.gsm	thirtieth (For IPBX-011CF only)
**0131	***0131	at.gsm	at (For IPBX-011CF only)
**0132	***0132	a-m.gsm	AM (For IPBX-011CF only)
**0133	***0133	p-m.gsm	PM (For IPBX-011CF only)
**0134	***0134	hundred.gsm	hundred (For IPBX-011CF only)
**0135	***0135	thousand.gsm	thousand (For IPBX-011CF only)
**0136	***0136	million.gsm	million (For IPBX-011CF only)
**0137	***0137	minus.gsm	minus (For IPBX-011CF only)
**0201	***0201	day-0.gsm	Sunday (For IPBX-011CF only)
**0202	***0202	day-1.gsm	Monday (For IPBX-011CF only)
**0203	***0203	day-2.gsm	Tuesday (For IPBX-011CF only)
**0204	***0204	day-3.gsm	Wednesday (For IPBX-011CF only)
**0205	***0205	day-4.gsm	Thursday (For IPBX-011CF only)
**0206	***0206	day-5.gsm	Friday (For IPBX-011CF only)
**0207	***0207	day-6.gsm	Saturday (For IPBX-011CF only)
**0208	***0208	dollars.gsm	dollars (For IPBX-011CF only)
**0209	***0209	mon-0.gsm	January (For IPBX-011CF only)
**0210	***0210	mon-1.gsm	February (For IPBX-011CF only)
**0211	***0211	mon-2.gsm	March (For IPBX-011CF only)
**0212	***0212	mon-3.gsm	April (For IPBX-011CF only)
**0213	***0213	mon-4.gsm	May (For IPBX-011CF only)
**0214	***0214	mon-5.gsm	June (For IPBX-011CF only)
**0215	***0215	mon-6.gsm	July (For IPBX-011CF only)

**0216	***0216	mon-7.gsm	August (For IPBX-011CF only)
**0217	***0217	mon-8.gsm	September (For IPBX-011CF only)
**0218	***0218	mon-9.gsm	October (For IPBX-011CF only)
**0219	***0219	mon-10.gsm	November (For IPBX-011CF only)
**0220	***0220	mon-11.gsm	December (For IPBX-011CF only)
**0221	***0221	oh.gsm	O (spoken in a way meaning “zero”) (For IPBX-011CF only)
**0222	***0222	oclock.gsm	a clock (For IPBX-011CF only)
**0223	***0223	pound.gsm	pound (For IPBX-011CF only)
**0224	***0224	star.gsm	star (For IPBX-011CF only)
**0225	***0225	today.gsm	today (For IPBX-011CF only)
**0226	***0226	tomorrow.gsm	tomorrow (For IPBX-011CF only)
**0227	***0227	yesterday.gsm	yesterday (For IPBX-011CF only)
GroupName: Auto Attendant Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**111	***111	greeting-day.gsm	Please dial the extension number, or press, 9, for the operator
**112	***112	greeting-noon.gsm	Please dial the extension number. Thank you.
**113	***113	greeting-night.gsm	Please dial the extension number. Thank you.
**114	***114	greeting-holiday.gsm	Please dial the extension number. Thank you. (It is reserved, not functional now)
**115	***115	greeting-temporary.gsm	Please dial the extension number. Thank you.
**116	***116	noanswer.gsm	I am sorry, the extension number you dialed, is not answering. Please dial another extension number, or press, 9, for the operator.
**117	***117	busy.gsm	I am sorry. The extension number you dialed is busy. Please dial another extension number, or press, 9, for the operator.
**118	***118	goodbyeivr.gsm	goodbye
**119	***119	unavailable.gsm	I am sorry, the extension number you dialed is unavailable; please dial another extension number, or press, 9, for the

			operator.
**120	***120	invalid.gsm	I am sorry, that's not a valid extension. Please try again.
**121	***121	dnd-act.gsm	Do not disturb, activated.
**122	***122	dnd-deact.gsm	Do not disturb, dee-activated.
**123	***123	unconfwd-act.gsm	Unconditional forward, activated.
**124	***124	unconfwd-deact.gsm	Unconditional forward, dee-activated.
**125	***125	busyfwd-act.gsm	Busy forward, activated.
**126	***126	busyfwd-deact.gsm	Busy forward, dee-activated.
**127	***127	op-noanswer.gsm	The operator is not answering. Please call later, or dial another extension number.
**128	***128	op-busy.gsm	The operator is busy. Please call later, or dial another extension number.
**129	***129	op-unavailable.gsm	The operator is unavailable. Please call later, or dial another extension number.
**130	***130	noanswerfwd-act.gsm	No answer forward, activated.
**131	***131	noanswerfwd-deact.gsm	No answer forward, dee-activated.
**132	***132	allfwd-deact.gsm	Call forward, dee-activated.
**133	***133	transferop.gsm	Transfer-ring to operator. Please hold.
**134	***134	unavailablefwd-act.gsm	The “Unavailable Forward” is activated.
**135	***135	unavailablefwd-deact.gsm	The “Unavailable Forward” is deactivated.
GroupName: Voice Mail Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**0301	***0301	vm-advopts.gsm	Press, 3, for advanced options. (For IPBX-011CF only)
**0302	***0302	vm-and.gsm	and (For IPBX-011CF only)
**0303	***0303	vm-calldiffnum.gsm	Press, 2, to enter a different number. (For IPBX-011CF only)
**0304	***0304	vm-changeto.gsm	Change to which folder? (For IPBX-011CF only)

**0305	***0305	vm-cust1.gsm	Folder. Five (For IPBX-011CF only)
**0306	***0306	vm-cust2.gsm	Folder. Six (For IPBX-011CF only)
**0307	***0307	vm-cust3.gsm	Folder. Seven (For IPBX-011CF only)
**0308	***0308	vm-cust4.gsm	Folder. Eight (For IPBX-011CF only)
**0309	***0309	vm-cust5.gsm	Folder. Nine (For IPBX-011CF only)
**0310	***0310	vm-delete.gsm	Press, 7, to delete this message. (For IPBX-011CF only)
**0311	***0311	vm-deleted.gsm	Message deleted. (For IPBX-011CF only)
**0312	***0312	vm-dialout.gsm	Please wait, while I connect your call. (For IPBX-011CF only)
**0313	***0313	vm-enter-num-to-call.gsm	Please enter the number, you wish to call. (For IPBX-011CF only)
**0314	***0314	vm-extension.gsm	extension (For IPBX-011CF only)
**0315	***0315	vm-Family.gsm	family (For IPBX-011CF only)
**0316	***0316	vm-first.gsm	first (For IPBX-011CF only)
**0317	***0317	vm-for.gsm	for (For IPBX-011CF only)
**0318	***0318	vm-forward.gsm	Press, 1, to enter an extension. Press, 2, to use the directory. (For IPBX-011CF only)
**0319	***0319	vm-forwardoptions.gsm	Press, 1, to pre-pend the message, or, 2, to forward a message without pre-pending. (For IPBX-011CF only)
**0320	***0320	vm-Friends.gsm	friend (For IPBX-011CF only)
**0321	***0321	vm-from.gsm	from (For IPBX-011CF only)
**0322	***0322	vm-from-extension.gsm	Message from extension, (For IPBX-011CF only)
**0323	***0323	vm-from-phonenumber.gsm	Message from phone number, (For IPBX-011CF only)
**0324	***0324	vm-goodbye.gsm	goodbye (For IPBX-011CF only)
**0325	***0325	vm-helpexit.gsm	Press, star for help, or pound to exit. (For IPBX-011CF only)
**0326	***0326	vm-INBOX.gsm	new (For IPBX-011CF only)
**0327	***0327	vm-incorrect.gsm	Login incorrect. (For IPBX-011CF only)
**0328	***0328	vm-incorrect-mailbox.gsm	Login incorrect. Mailbox (For IPBX-011CF only)
**0329	***0329	vm-instructions.gsm	To check your messages, press, 1, now. You may quit voicemail, at any time by pressing the, pound key. (For IPBX-011CF only)
**0330	***0330	vm-intro.gsm	Please leave your message after the tone.

			When done, hang up or press the pound key.
**0331	***0331	vm-isonphone.gsm	is on the phone.
**0332	***0332	vm-isunavail.gsm	is unavailable.
**0333	***0333	vm-last.gsm	last (For IPBX-011CF only)
**0334	***0334	vm-leavemsg.gsm	Press, 5, to leave a message. (For IPBX-011CF only)
**0335	***0335	vm-login.gsm	Welcome to Voice Mail. Mailbox, (For IPBX-011CF only)
**0336	***0336	vm-mailboxfull.gsm	Sorry, but the user's mail box, can not accept anymore messages. (For IPBX-011CF only)
**0337	***0337	vm-message.gsm	message (For IPBX-011CF only)
**0338	***0338	vm-messages.gsm	messages (For IPBX-011CF only)
**0339	***0339	vm-minutes.gsm	minutes (For IPBX-011CF only)
**0340	***0340	vm-mismatch.gsm	The passwords you entered, do not match. Please try again. (For IPBX-011CF only)
**0341	***0341	vm-msginstruct.gsm	To hear the next message, press, 6. To repeat this message, press, 5. To hear the previous message, press, 4. To delete or undelete this message, press, 0. To quit voice mail, press, pound. (For IPBX-011CF only)
**0342	***0342	vm-msgsaved.gsm	Your message has been saved. (For IPBX-011CF only)
**0343	***0343	vm-newpassword.gsm	Please enter your new password, followed by the pound key. (For IPBX-011CF only)
**0344	***0344	vm-newuser.gsm	Welcome to Voice Mail! First, I will guide you through a short setup process. (For IPBX-011CF only)
**0345	***0345	vm-next.gsm	Press, 6, to play the next message. (For IPBX-011CF only)
**0346	***0346	vm-no.gsm	no (For IPBX-011CF only)
**0347	***0347	vm-nobodyavail.gsm	Sorry, No one is available to take your call at this moment. (For IPBX-011CF only)
**0348	***0348	vm-nobox.gsm	You can not reply to this message, because the sender, does not have a mailbox. (For IPBX-011CF only)
**0349	***0349	vm-nomore.gsm	No more messages. (For IPBX-011CF only)

**0350	***0350	vm-nonumber.gsm	I am sorry. I don't know who sent this message. (For IPBX-011CF only)
**0351	***0351	vm-num-i-have.gsm	the number I have is, (For IPBX-011CF only)
**0352	***0352	vm-Old.gsm	old (For IPBX-011CF only)
**0353	***0353	vm-onefor.gsm	Press, 1, for (For IPBX-011CF only)
**0354	***0354	vm-options.gsm	Press, 1, to record your unavailable message. Press, 2, to record your busy message. Press, 3, to record your name. Press, 4, to record your temporary greeting. Press, star to return to the main menu. (For IPBX-011CF only)
**0355	***0355	vm-opts.gsm	Press, 2, to change folders. Press, 3, for advanced options. Press, zero, for mailbox options. (For IPBX-011CF only)
**0356	***0356	vm-passchanged.gsm	Your passwords have been changed. (For IPBX-011CF only)
**0357	***0357	vm-password.gsm	password (For IPBX-011CF only)
**0358	***0358	vm-press.gsm	press (For IPBX-011CF only)
**0359	***0359	vm-prev.gsm	Press, 4, for the previous message. (For IPBX-011CF only)
**0360	***0360	vm-reachoper.gsm	Press, 9, to reach the operator. (For IPBX-011CF only)
**0361	***0361	vm-rec-busy.gsm	After the tone, say your busy message, then press the pound key. (For IPBX-011CF only)
**0362	***0362	vm-received:gsm	received (For IPBX-011CF only)
**0363	***0363	vm-rec-name.gsm	After the tone, say your name, then press the pound key. (For IPBX-011CF only)
**0364	***0364	vm-rec-temp.gsm	After the tone, say your temporary message, then press the pound key. (For IPBX-011CF only)
**0365	***0365	vm-rec-unv.gsm	After the tone, say your un available message, then press the pound key. (For IPBX-011CF only)
**0366	***0366	vm-reenterpassword.gsm	Please reenter your password followed by the pound key. (For IPBX-011CF only)
**0367	***0367	vm-repeat.gsm	Press, 5, to repeat the current message. (For IPBX-011CF only)
**0368	***0368	vm-review.gsm	Press, 1, to accept this recording. Press, 2,

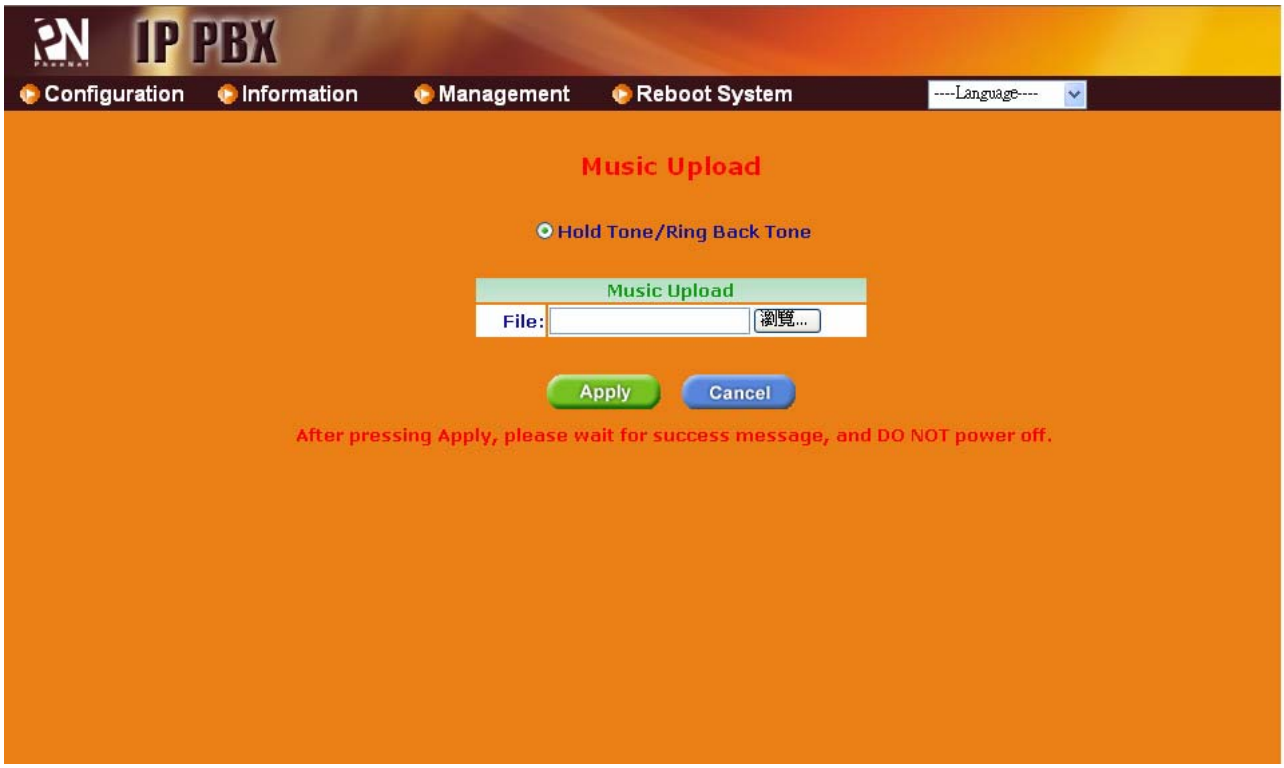
			to listen to it. Press, 3, to re-record your message. (For IPBX-011CF only)
**0369	***0369	vm-saved.gsm	saved (For IPBX-011CF only)
**0370	***0370	vm-savedto.gsm	save to (For IPBX-011CF only)
**0371	***0371	vm-savefolder.gsm	Which folder should I save the message to? (For IPBX-011CF only)
**0372	***0372	vm-savemessage.gsm	or, 9, to save this message. (For IPBX-011CF only)
**0373	***0373	vm-saveoper.gsm	Press, 1, to accept this recording. Otherwise, please stay on the line. (For IPBX-011CF only)
**0374	***0374	vm-sorry.gsm	I am sorry. I did not understand your response. (For IPBX-011CF only)
**0375	***0375	vm-star-cancel.gsm	Press, star to cancel. (For IPBX-011CF only)
**0376	***0376	vm-starmain.gsm	Press, star to return to the main menu. (For IPBX-011CF only)
**0377	***0377	vm-tempgreeting2.gsm	Press, 1, to record your temporary greeting, or press, 2, to delete your temporary greeting. (For IPBX-011CF only)
**0378	***0378	vm-tempgreeting.gsm	Press, 1, to record your temporary greeting. (For IPBX-011CF only)
**0379	***0379	vm-tempremoved.gsm	Your temporary greeting has been deleted. (For IPBX-011CF only)
**0380	***0380	vm-then-pound.gsm	Then press, pound. (For IPBX-011CF only)
**0381	***0381	vm-theperson.gsm	The person at extension,
**0382	***0382	vm-tocallback.gsm	Press, 2, to call the person, who sent this message. (For IPBX-011CF only)
**0383	***0383	vm-tocallnum.gsm	Press, 1, to call this number. (For IPBX-011CF only)
**0384	***0384	vm-tocancel.gsm	or press, pound, to cancel. (For IPBX-011CF only)
**0385	***0385	vm-tocancelmsg.gsm	Press, star to cancel this message. (For IPBX-011CF only)
**0386	***0386	vm-toenternumber.gsm	Press, 1, to enter a number (For IPBX-011CF only)
**0387	***0387	vm-toforward.gsm	Press, 8, to forward the message to another user. (For IPBX-011CF only)
**0IPP-188	***0IPP-188	vm-tohearenv.gsm	Press, 3, to hear the message envelope. (For IPBX-011CF only)

**0389	***0389	vm-tomakecall.gsm	Press, 4, to place an out-going call. (For IPBX-011CF only)
**0390	***0390	vm-tooshort.gsm	Your message is too short (For IPBX-011CF only)
**0391	***0391	vm-toreply.gsm	Press, 1, to send a reply. (For IPBX-011CF only)
**0392	***0392	vm-torerecord.gsm	Press, 3, to record your message. (For IPBX-011CF only)
**0393	***0393	vm-undelete.gsm	Press, 7, to undelete this message. (For IPBX-011CF only)
**0394	***0394	vm-undeleted.gsm	Message undeleted. (For IPBX-011CF only)
**0395	***0395	vm-unknow-caller.gsm	from an unknown caller (For IPBX-011CF only)
**0396	***0396	vm-whichbox.gsm	To leave a message, please enter a mailbox number. (For IPBX-011CF only)
**0397	***0397	vm-Work.gsm	work (For IPBX-011CF only)
**0398	***0398	vm-youhave.gsm	you have, (For IPBX-011CF only)
GroupName: General Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**0400	***0400	beep.gsm	(This is a beep tone)
**0401	***0401	hours.gsm	hours (For IPBX-011CF only)
**0402	***0402	minutes.gsm	minutes (For IPBX-011CF only)
**0403	***0403	auth-incorrect.gsm	Password incorrect. Please enter your password followed by the pound key.
**0404	***0404	auth-thankyou.gsm	Thank you.
**0405	***0405	pbx-invalid.gsm	I am sorry, that is not a valid extension. Please try again.
**0406	***0406	pbx-invalidpark.gsm	I am sorry, there is no call parked on that extension. Please try again. (It is reserved, not functional now)
**0407	***0407	pbx-transfer.gsm	Transfer.
**0408	***0408	privacy-incorrect.gsm	I'm sorry, that number is not valid. (For IPBX-011CF only)
**0409	***0409	privacy-prompt.gsm	Please enter your ten-digit phone number, starting with the area code. (It is reserved, not

			functional now)
**0410	***0410	privacy-thankyou.gsm	Thank you.
**0411	***0411	privacy-unident.gsm	The party you are trying to reach does not accept unidentified calls. (It is reserved, not functional now)
**0412	***0412	ss-noservice.gsm	The number you have dialed is not in service. Please check the number and try again. (It is reserved, not functional now)
**0413	***0413	transfer.gsm	Please hold, while I try that extension.
**0414	***0414	ivrrecord.gsm	Please enter the access code.
**0415	***0415	CB-act.gsm	Call back on Busy, activated.
**0416	***0417	clir-act.gsm	“Caller Line Identification Restriction”, activated.
**0416	***0417	clir-deact.gsm	“Caller Line Identification Restriction”, dee-activated.
GroupName: Agent Sounds Files			
Access Code for Recording	Access Code for Listening	File Name	Default System Prompt
**0445	***0445	agent-pass.gsm	Please enter password followed by the pound key.

4.2 Customize Ring Back Tone (Transferring Tone)

User can customize Ring Back Tone by upload new wave file on IPBX-011 / IPBX-011CF. Please record wave file format as **PCM, Channel Mode: Mono, Frequency: 8K, Bit Rate: 16 bit**. Enter **Management → Music Upload → Press Browse…→ select wave file → Press Apply to upload special Ring Back Tone**. After Upload is finished, press Reboot to reboot system to renew Ring Back Tone.



4.3 Call Features

4.3.1 Authentication

When IPBX-011 / IPBX-011CF get a Registration or Invite (incoming call) from a remote location, it will reply Authentication for security issue.

4.3.2 Automated Attendant

The IPBX-011 / IPBX-011CF supports Automated Attendant; you can record the default greeting and the other announcements by Extension. For more information, please refer to the user manual: **CH4.1.3 How to record the other system prompts.**

4.3.3 Call Transfer

The IPBX-011 / IPBX-011CF support “server transfer” now; you can enable the Hot-key Tran function in IP PBX and Trunk page. After enable Hot-key Tran, you can press *9 for Call Transfer. You can also perform the Client based Call transfer by subscriber device and the transfer function of the subscriber device should follow SIP standard.

4.3.4 Blind Transfer

The IPBX-011 / IPBX-011CF support “server blind transfer” now; you can enable the Hot-key Tran function in IP PBX and Trunk page. After enable Hot-key Tran, you can press *0 for Blind Transfer. You can also perform the Client based Call transfer by subscriber device and the transfer function of the subscriber device should follow SIP standard.

4.3.5 Call Forward on Busy

The IPBX-011 / IPBX-011CF can support “server forward”. User can dial to *90 to active Call Forward on Busy and *91 to inactive. For example, extension 101 dial to *90102, there will be an announcement to notify you the call forward is enabled, and someone call to 101 but 101 is on the phone. The call will be routed to 102.

4.3.6 Call Forward on No Answer

The IPBX-011 / IPBX-011CF can support “server forward”. User can dial to *92 to active Call Forward on No Answer and *93 to inactive. For example, extension 101 dial to *92102, there will be an announcement to notify you the call forward is enabled, and someone call to 101 but 101 is no answer. The call will be routed to 102.

4.3.7 Call Forward Unconditional

The IPBX-011 / IPBX-011CF can support “server forward”. User can dial to *72 to active Unconditional Forward and *73 to inactive. For example, extension 101 dial to *72102, there will be an announcement to notify you the call forward is enabled, and someone call to 101, the call will be routed to 102 directly.

4.3.8 Call Forward Unavailable

If subscriber is not registering, the call will be forward to another number when Unavailable Forward is enabled. To activate Unavailable Forward, press *93xxx, where the *93 is the feature code to activate Unavailable Forward and xxx is the destination number. Pressing [*94] for deactivate

For example, extension 101 dial to *93102, there will be an announcement to notify you the Unavailable Forward is enabled, and someone call to 101, but 101 is not registering, the call will be routed to 102. .

4.3.9 Call Hold/Retrieval (Client based)

Normally, the call hold and call retrieval is done by Client, the IPBX-011 / IPBX-011CF just relay the SIP signal for such function.

4.3.10 Call Routing

In the **Configuration → Routing Table**, you can set the Routing record for a specified Prefix.

4.3.11 Call Waiting (Client based)

The IPBX-011 / IPBX-011CF does not support “server Call Waiting” now, this feature should be done by client. For example, if the client is PheeNet IPP-188, you can enable this feature by “CLI”. For more information about IPP-188, please go to:
http://www.pheenet.com

4.3.12 Caller ID

The IPBX-011 / IPBX-011CF will relay the caller ID from caller to callee.

4.3.13 CLIR (Caller Line Identification Restriction)

CLIR means "Caller Line Identification Restriction". It is a proper noun.

It is a feature to hide the caller's number. For example, ext 101 call to ext 102. But 101 won’t like to show the caller ID to 102. So 101 can activate this feature to hide the caller ID. When 102 got a call from 101, the LCD of 102 should display "Anonymous".

IPBX-011CF could support two kinds of CLIR.

a) CLIR (per call): for example, 101 won’t like to show the caller id for 102. 101 can just dial to "*67102", where the *67 is the feature for CLIR (per call). When 102 got the incoming call, the LCD of 102 should display "Anonymous". If 101 just dial to "102", then 102 should see the Caller ID as 101.

b) CLIR (database type): for example. 101 dial to "*31", IPBX-011CF should add the CLIR record for 101 into its database. When 101 call to 102, 103...,etc. The LCD of called party should always show "Anonymous". 101 can dial to "*32" to disable this feature.

4.3.14 Do Not Disturb (Client based)

The IPBX-011 / IPBX-011CF can support “server DND”. User can dial to *78 to active it and *79 to inactive. For example, extension 101 dial to *78, there will be an announcement to notify you the DND is enabled, and someone call to 101 then the call will be rejected directly.

4.3.15 Flexible Extension Logic

You can set the digits length of subscriber to 30 digits.

4.3.16 Music On Hold

The IPBX-011 / IPBX-011CF will play music if the user is under Hold status.

4.3.17 Music On Transfer

The IPBX-011 / IPBX-011CF will play music if the user is under Transfer status.

4.3.18 Call Pickup

The IPBX-011 / IPBX-011CF can support Global and Group Call Pickup. For example: Ext-A is ringing, Ext-B can press ***8** for call pickup.

4.3.19 Call Park

By default, extension 700 is used to park a call. While in a conversation, press *0 to initiate a blind transfer, and then dial 700. IPBX-011CF will now announce the parking extension, most probably 701 or 702. Now hang up - the caller will be left on hold at the announced extension. Walk up to a different phone, dial 701 and the conversation can be continued. If a caller has been parked for a longer time than 45 seconds, then IPBX-011CF will again ring the originally dialed extension.

4.3.20 Camp-On (Call Back on Busy)

For example, you dial to 101 but 101 is on the phone, then you should hear an announcement for busy. You could dial to *66 by default to trigger the IPBX-011CF call back to you when 101 is idle. This function will let u talk to called party immediately when called party is free.

This Function is only workable when voice mail function of called party is disabled. When this function is enabled, IPBX-011CF will check the status of called party every 20 seconds, at most 15 times. That means this function may be performed when called party is idled after 20 seconds at most. And 300 (20*15) seconds later, this function will not be workable.

4.3.21 Three-way Conference (IPP-188)

The IPBX-011 / IPBX-011CF does not support “server Conference” now, this feature should be done by client. For example, if the client is PheeNet IPP-188, you can enable this feature by Conf button. For more information about IPP-188, please go to: **http://www.pheenet.com**

4.3.22 Time and Date

You can select correct Time Zone for IPBX-011 / IPBX-011CF; this time will affect CDR and voice mail time display.

4.3.23 Trunking (VG-1440R)

You can install a FXO gateway as a Trunk. The FXO gateway can connect with a PSTN line so that your Extension can dial to PSTN via FXO gateway. For more info, please refer to user manual: **CH5 Appendix-Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.**

4.3.24 VoIP Gateways (VG-1440R; VG-1404R)

You can install a FXO gateway as a Trunk. The FXO gateway can connect with a PSTN line so that your Extension can dial to PSTN via FXO gateway. You can also install a FXS gateway as an Extension. For more info, please refer to: **CH5. Appendix-Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.**

4.3.25 Voice Mail to e-mail

You should configure the SMTP setting to perform Voice Mail to e-mail. If the IPBX-011 / IPBX-011CF got a new message, it will send the message to user by email immediately.

4.3.26 Access Voice Mail by phone set (IPBX-011CF only)

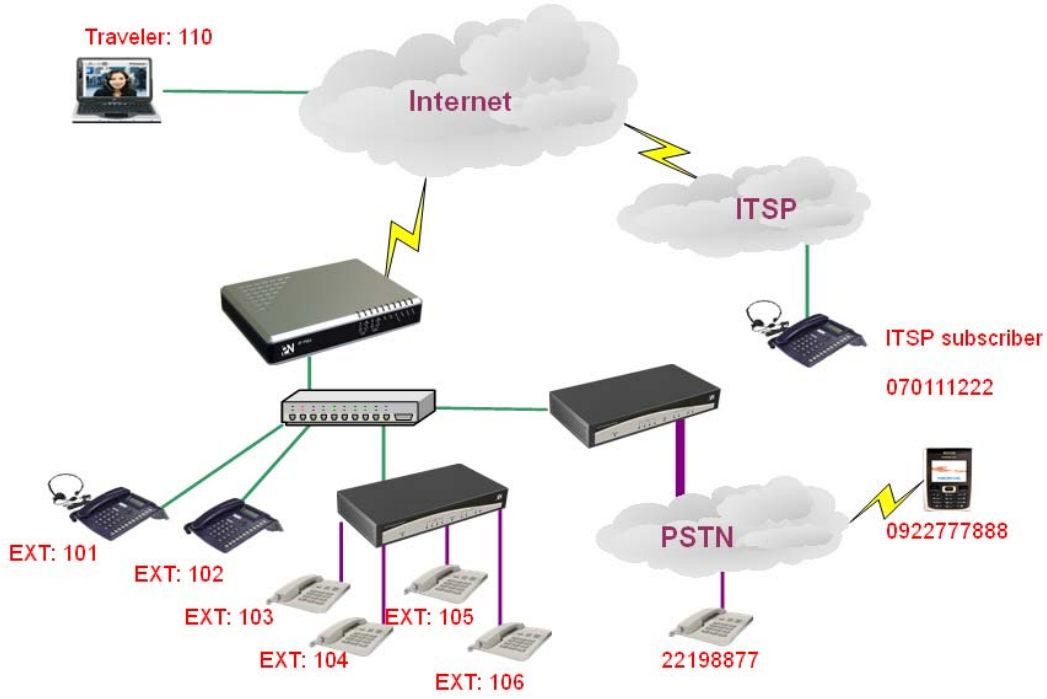
IPBX-011 does not have enough Flash Rom to store voice mail within itself, but IPBX-011CF has a built-in CF card. That means IPBX-011CF can store voice mail within it. User can just dial to *98 then input mailbox number and password to access voice mail.

4.3.27 Call Monitor

In the **Information → Call Monitor**, you can monitor the call status if the call were routed by IPBX.

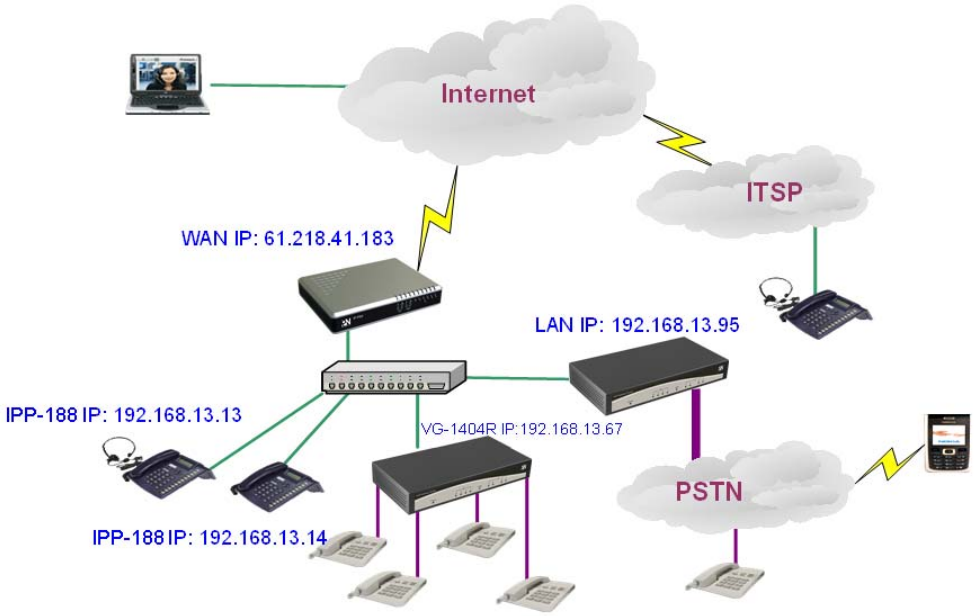
CH5. Appendix

5.1 Application between PheeNet CPE device and IPBX-011 / IPBX-011CF.

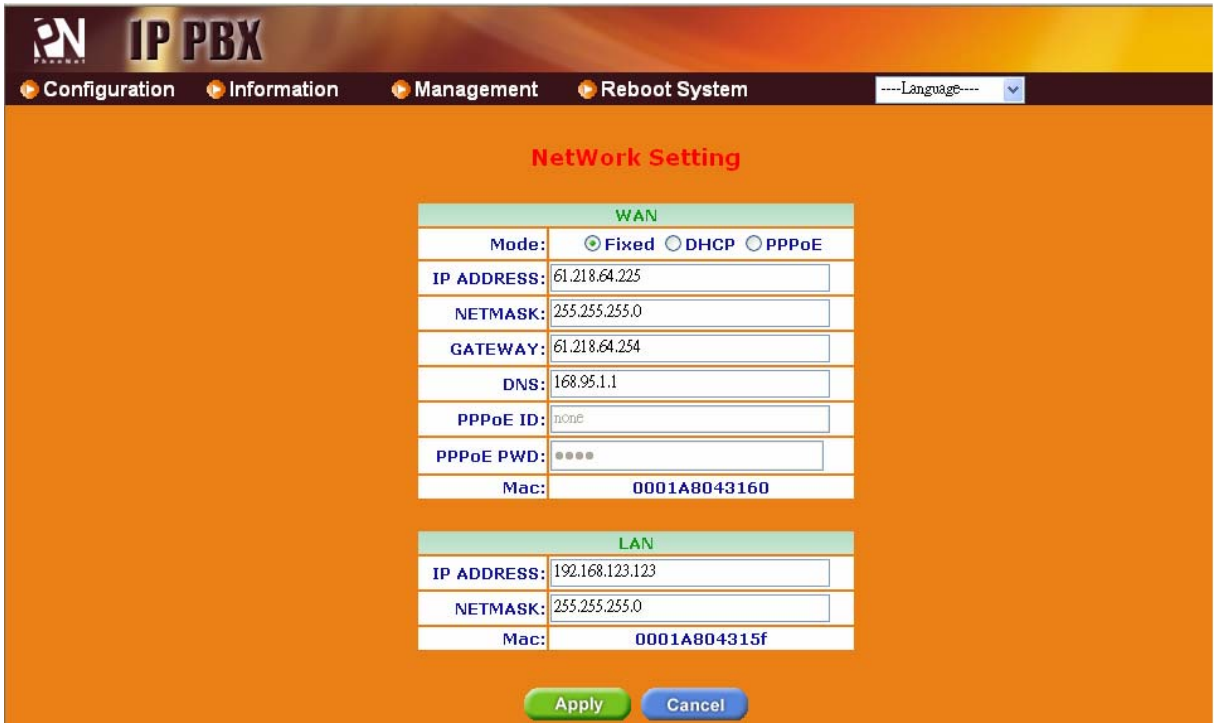


5.1.1 Extensions register to IPBX-011 / IPBX-011CF with number 101 to 106. All Extensions can talk to each other.

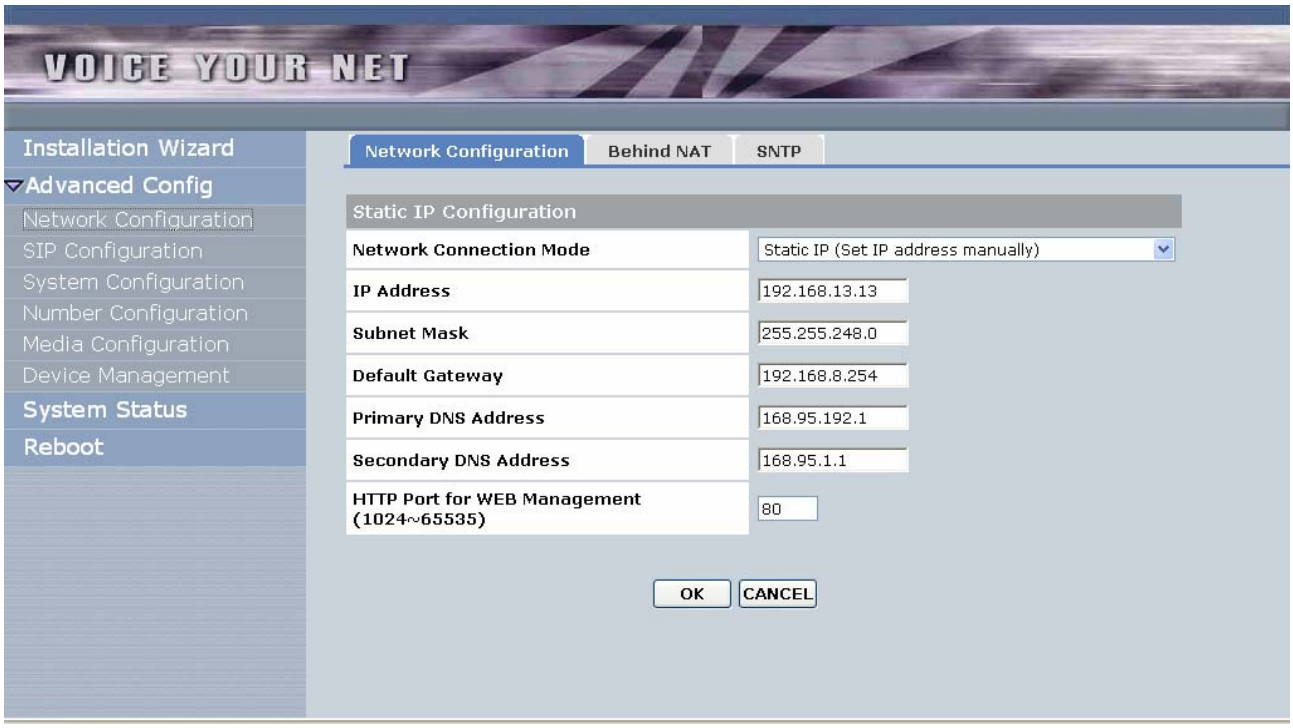
Step1: Setup Network for IPBX-011 / IPBX-011CF, IPP-188, VG-1404R.



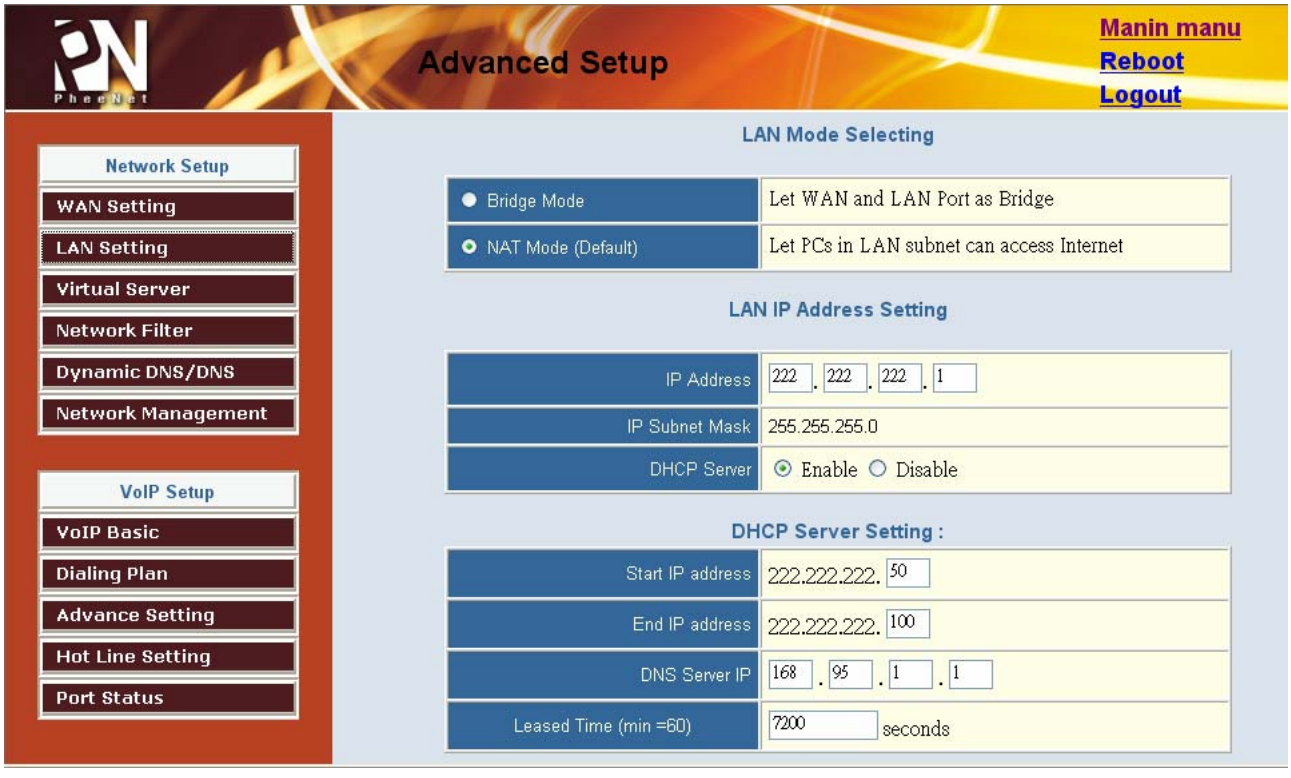
- Set IPBX-011 / IPBX-011CF with WAN [IP_ADDRESS: 61.218.41.183, NETMASK: 255.255.255.240, Gateway: 61.218.41.177, DNS: 168.95.1.1], LAN [IP_ADDRESS: 192.168.13.95, NETMASK: 255.255.248.0]. After setting finish, please press Apply and reboot your IPBX-011 / IPBX-011CF. When you got a new IPBX-011 / IPBX-011CF, you can connect its LAN port to configure Network Setting first. The default LAN IP address is 192.168.123.123. For more info, please refer to user's manual CH2. Start to configure IPBX-011 / IPBX-011CF.



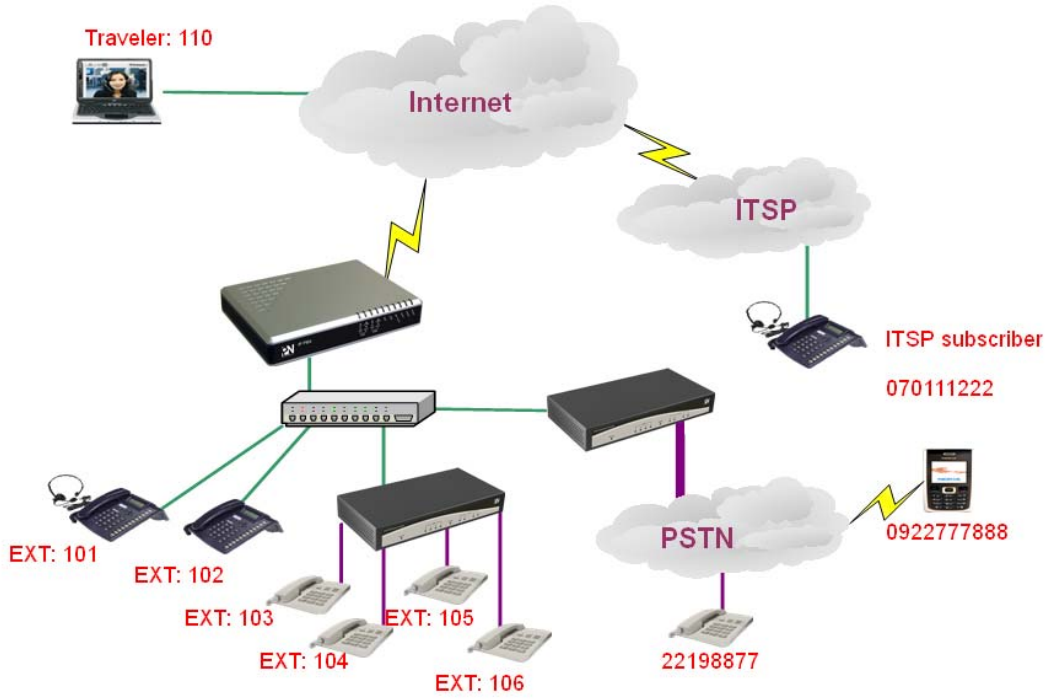
- Set IP information for IPP-188. You can set the IP info of IPP-188 by its LCD, or you can also login its WEB interface by default IP 10.1.1.3. Go to **Advanced Config → Network Configuration** to setup network as below, then press OK and reboot your IPP-188. For more information about IPP-188, please go to: http://www.pheenet.com



- Set IP information for VG-1404R. You can set the IP info of VG-1404R by its COM port, or you can also login its WEB interface by default IP 10.1.1.3. Go to **Network Interface** page to setup network setting as below. After set the network info, please press OK → Commit Data → Reboot System. For more information about VG-1404R, please go to: http://www.pheenet.com



Step2: Configure Extensions



- In IPBX-011 / IPBX-011CF, prepare Extension accounts for Client device. (There are 10 default Extensions, from 101 to 110, so we use the default setting for this Example) For more information about Extension page, please go to user's manual CH3- Full Web Configurations.

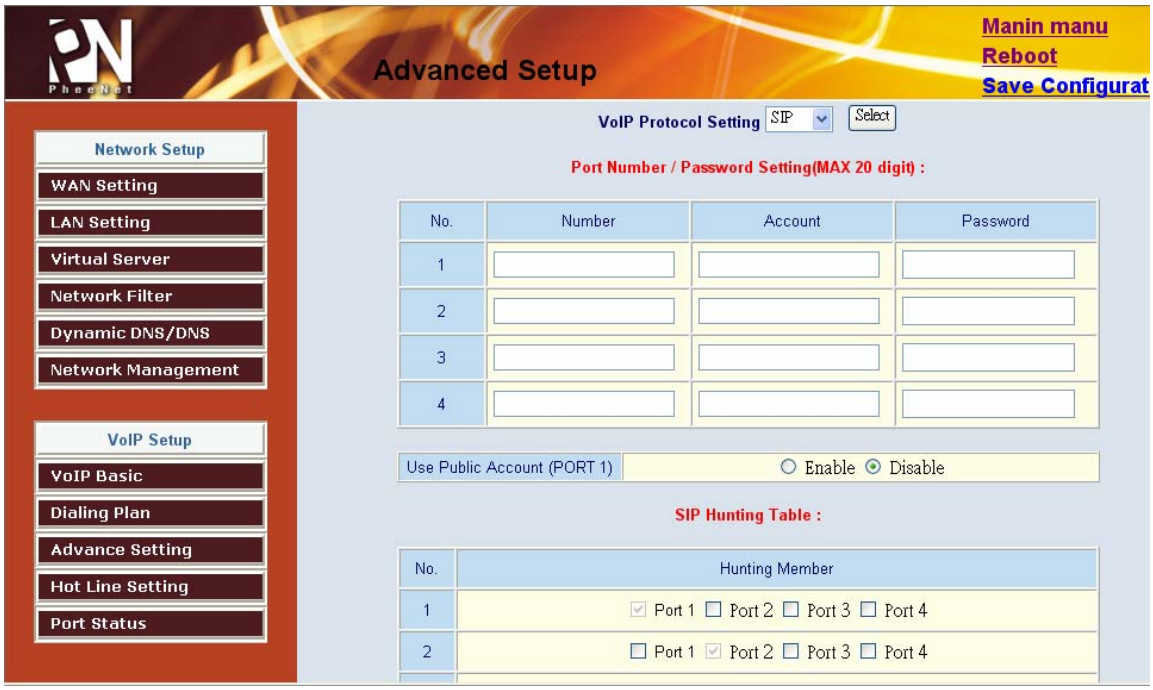
IP PBX

Configuration | Information | Management | Reboot System | ----Language----

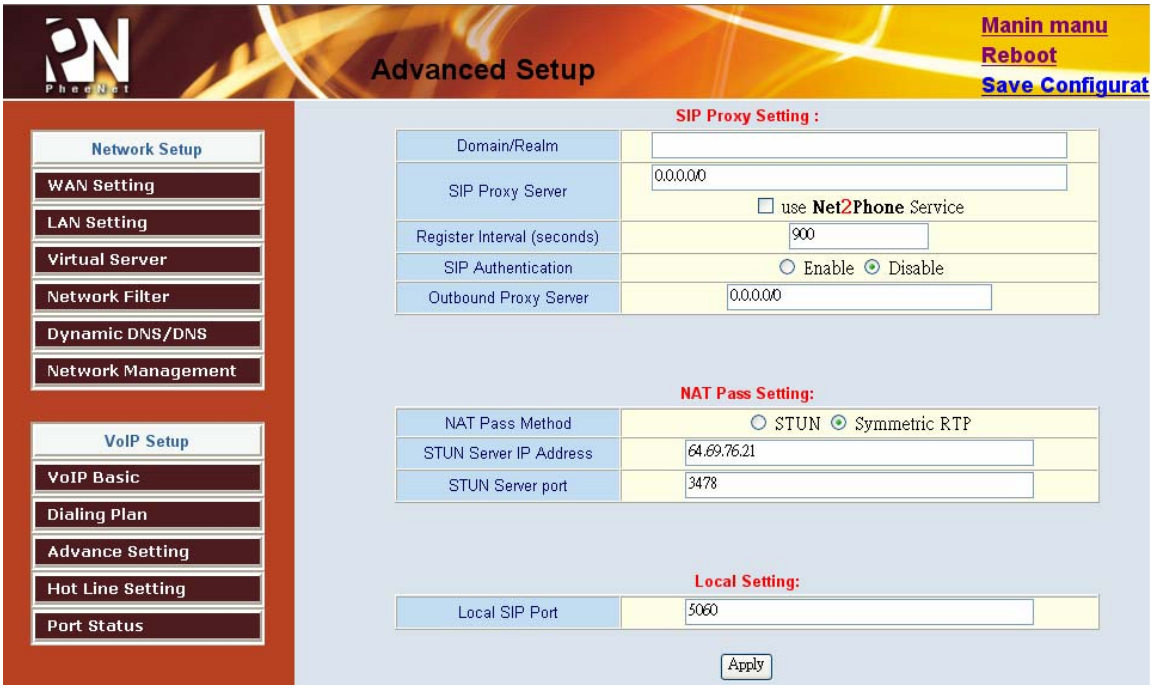
Extension

Index	Extension Number	Comment	Keypad	NAT Traversal	RTP Mode	Call Group	Pickup Group	Setting	
1	101	IPP-188-A	auto	Disable	Routed Mode	1	1	Modify	Delete
2	102	IPP-188-B	auto	Disable	Routed Mode	1	1	Modify	Delete
3	103	VG-1404R-1	auto	Disable	Routed Mode	1	1	Modify	Delete
4	104	VG-1404R-2	auto	Disable	Routed Mode	1	1	Modify	Delete
5	105	VG-1404R-3	auto	Disable	Routed Mode	1	1	Modify	Delete
6	106	VG-1404R-4	auto	Disable	Routed Mode	1	1	Modify	Delete
7	107	none	auto	Disable	Routed Mode	1	1	Modify	Delete
8	108	none	auto	Disable	Routed Mode	1	1	Modify	Delete
9	109	none	auto	Disable	Routed Mode	1	1	Modify	Delete
10	110	none	auto	Disable	Routed Mode	1	1	Modify	Delete
11	none	none	none	Disable	Routed Mode	none	none	Modify	Delete

- This Example, we have 2 IPP-188 register to IPBX-011 / IPBX-011CF with extension 101 and extension 102. You can set the SIP Configuration of IPP-188 by its LCD, or you can also login its WEB interface. Go to **Advance Config → SIP Configuration**, setup the Primary proxy Address and Registered Number… etc. After configuration, please remember to press OK then reboot your IPP-188. For more information about IPP-188, please go to: http://www.pheenet.com



- This Example, we have 1 VG-1404R register to IPBX-011 / IPBX-011CF with extension 103 to 106. You can set the SIP Information of VG-1404R by its COM port or you can also login its WEB interface for configuration as below. Set the VG-1404R to proxy mode, and also set the Primary Proxy IP Address and Line Number…, etc. After configure SIP information, please press OK → Commit Data → Reboot System. For more information about VG-1404R, please go to: http://www.pheenet.com.



- If all of the above settings are correct, you can go to **Information → Subscriber** page to confirm the register status.

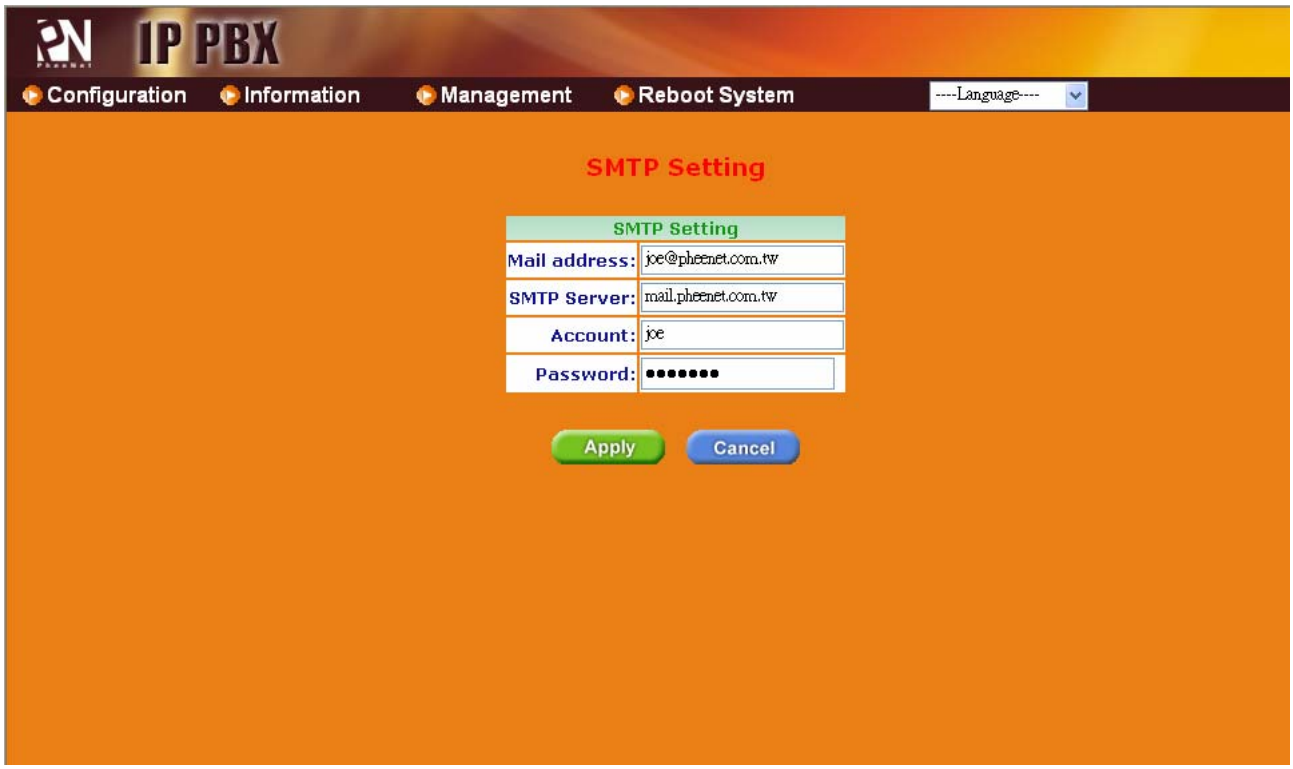
Index	Phone Number	UCF	NAF	BF	UAF	DND	CLIR
		IP Address			Mail Address		
1	101	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
2	102	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
3	103	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
4	104	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
5	105	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
6	106	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
7	107	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
8	108	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
9	109	Disable	Disable	Disable	Disable	Disable	Disable

Now, all of the Extensions can contact with each other. If the called party is busy or no answer, IPBX-011 / IPBX-011CF will play an announcement to indicate the called party's status.

5.1.2 The call will be forward to MailBox if the extension 101 is busy or no answer.

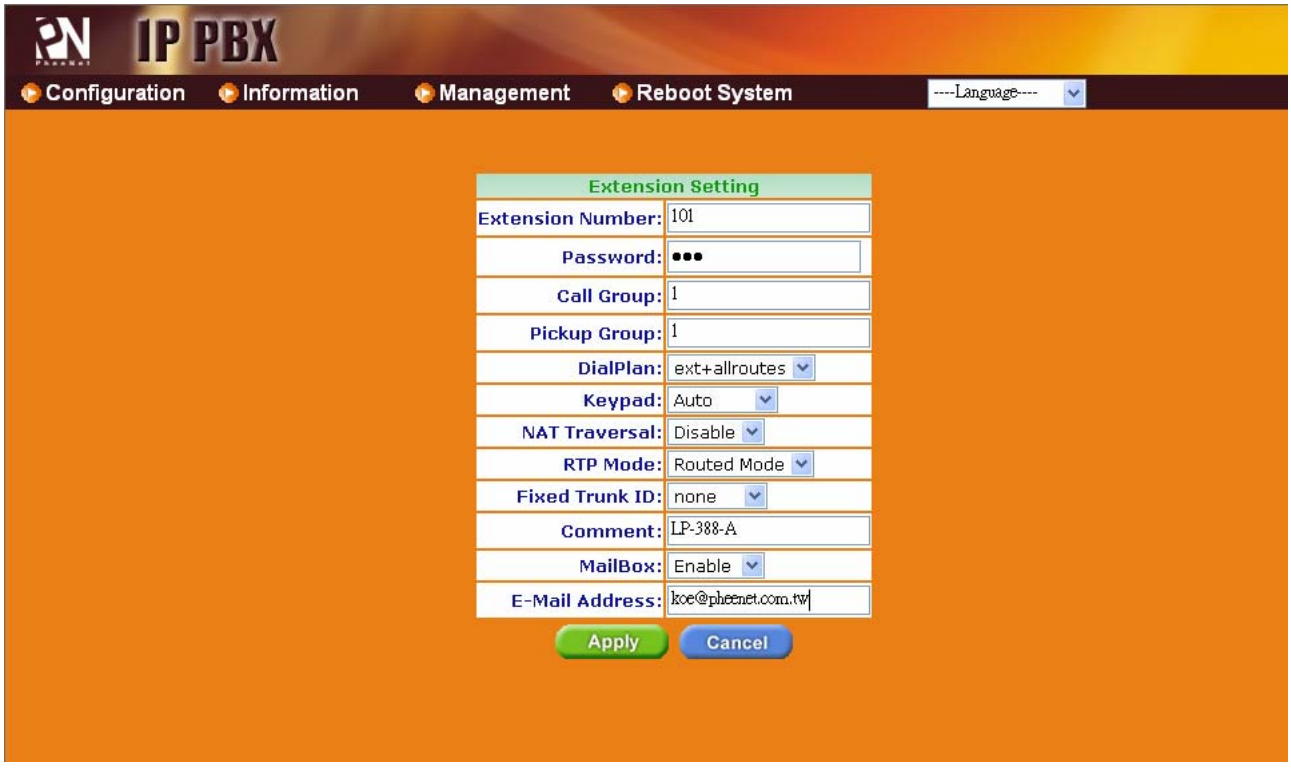
Step1: Configure SMTP setting

- Go to Management→ SMTP Setting to configure the SMTP.



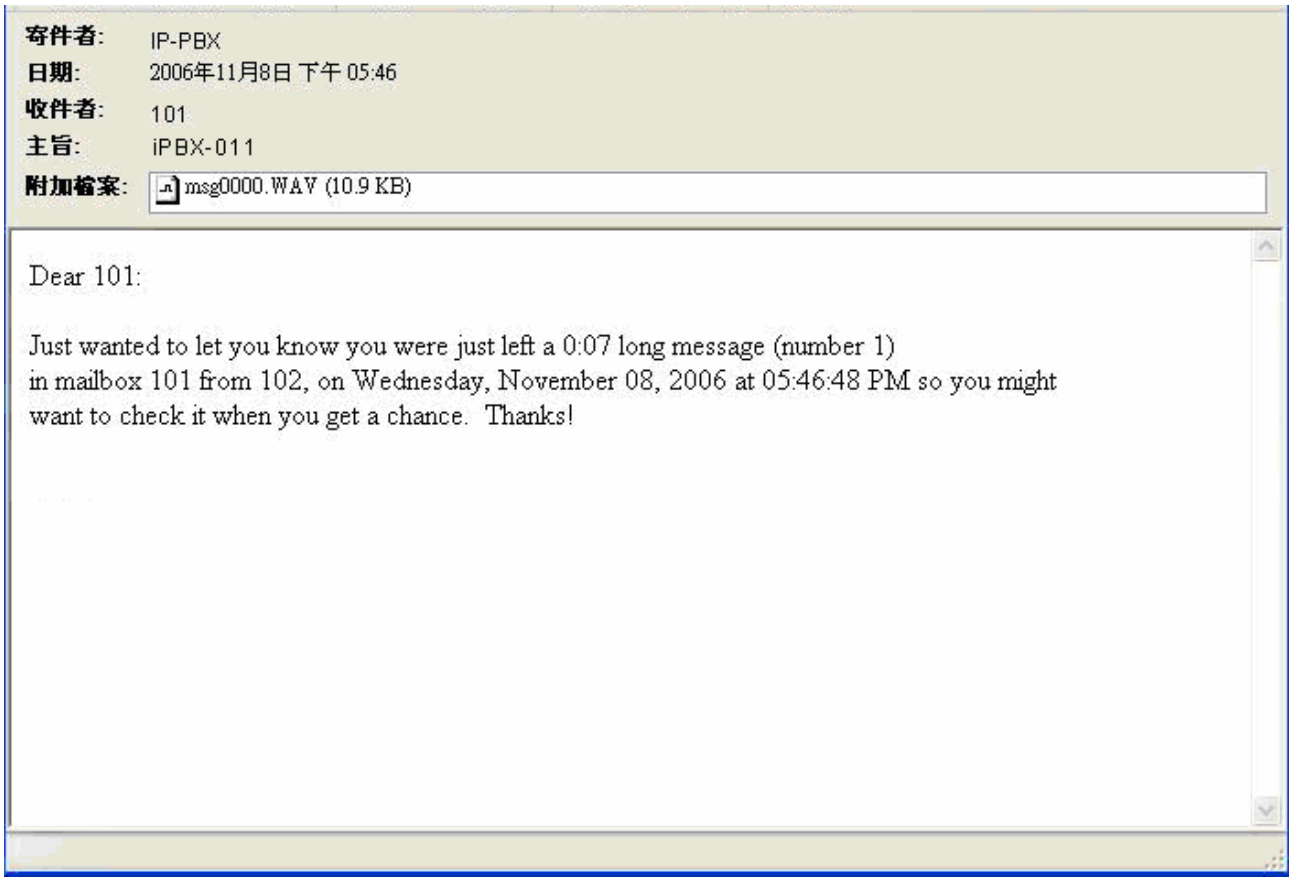
Step2: Enable Voice Mail function

- IPBX-011 / IPBX-011CF has 10 Extensions by default (101 to 110) and the voice mail function is disabled . You can enable the voice mail function as below.



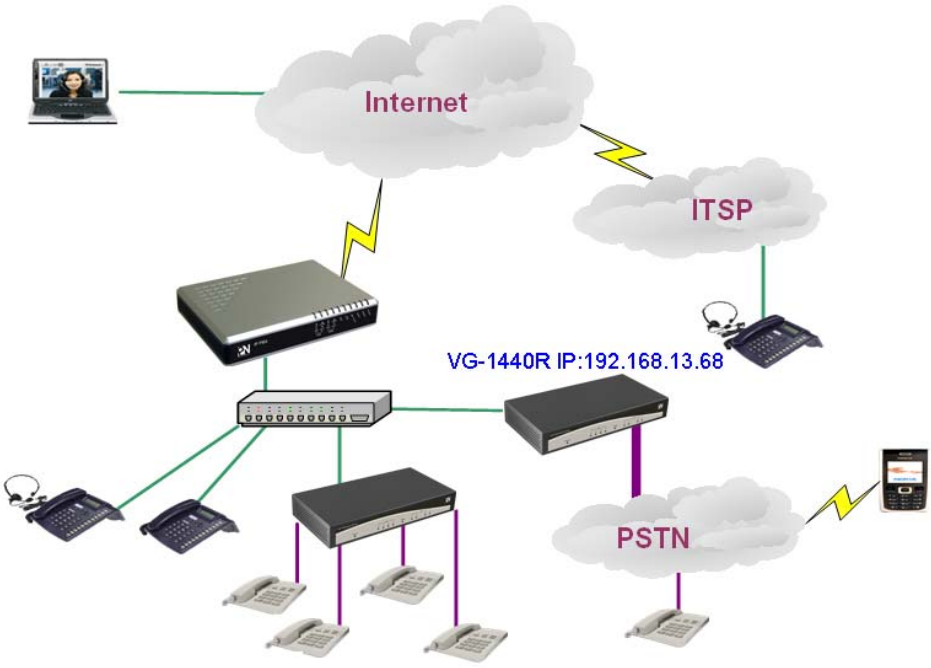
Step3: Confirm Voice Mail

- If 102 call to 101 but 101 is busy, IPBX-011 / IPBX-011CF will play an announcement to indicate the 101 is busy, and 102 can leave message for 101. IPBX-011 / IPBX-011CF will send voice mail to your mail box with a WAV format. Below is an example.

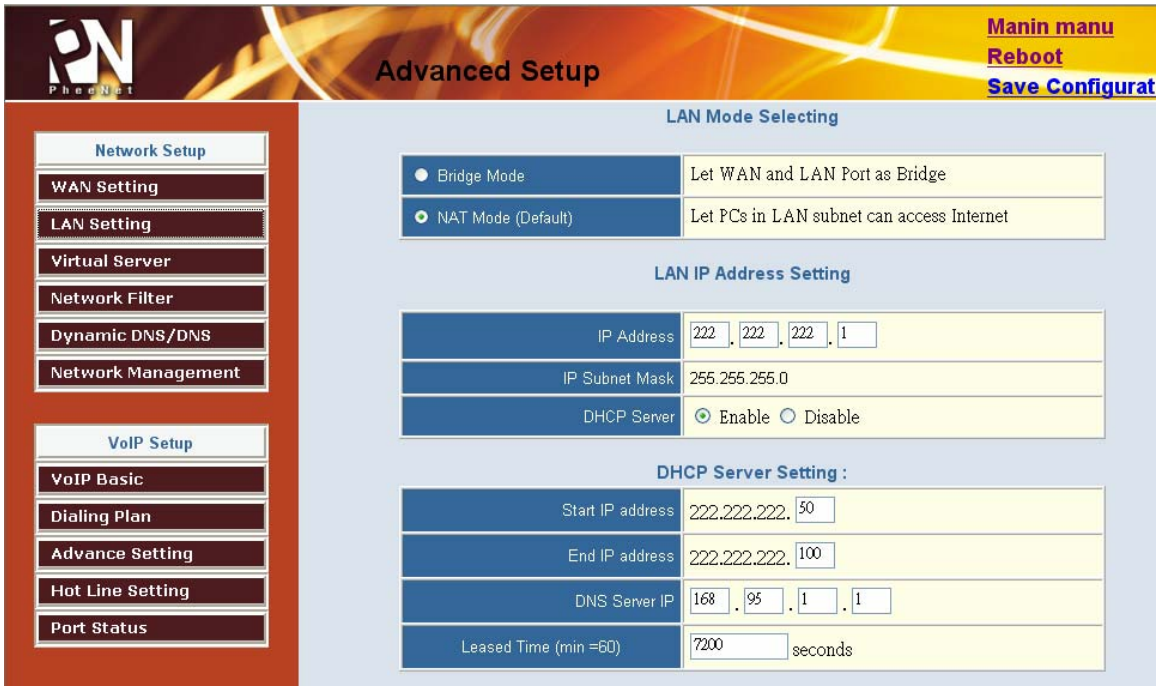

寄件者: IP-PBX
日期: 2006年11月8日 下午 05:46
收件者: 101
主旨: iPBX-011
附加檔案: msg0000.WAV (10.9 KB)
Dear 101:
Just wanted to let you know you were just left a 0:07 long message (number 1)
in mailbox 101 from 102, on Wednesday, November 08, 2006 at 05:46:48 PM so you might
want to check it when you get a chance. Thanks!

5.1.3 The Trunk (VG-1440R) can also register to IPBX-011 / IPBX-011CF (registered number 888).

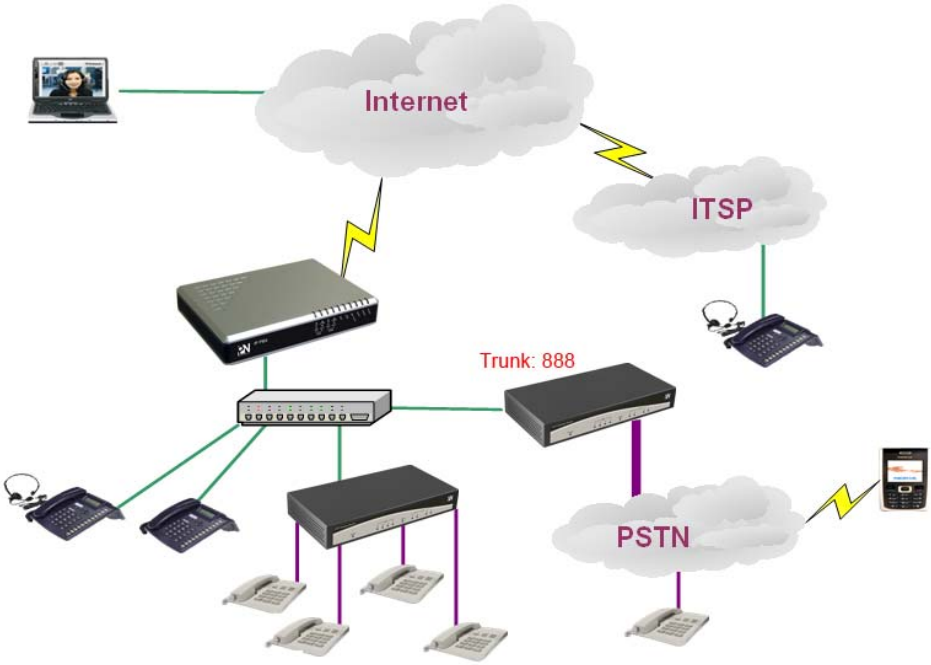
Step1: Setup Network for VG-1440R



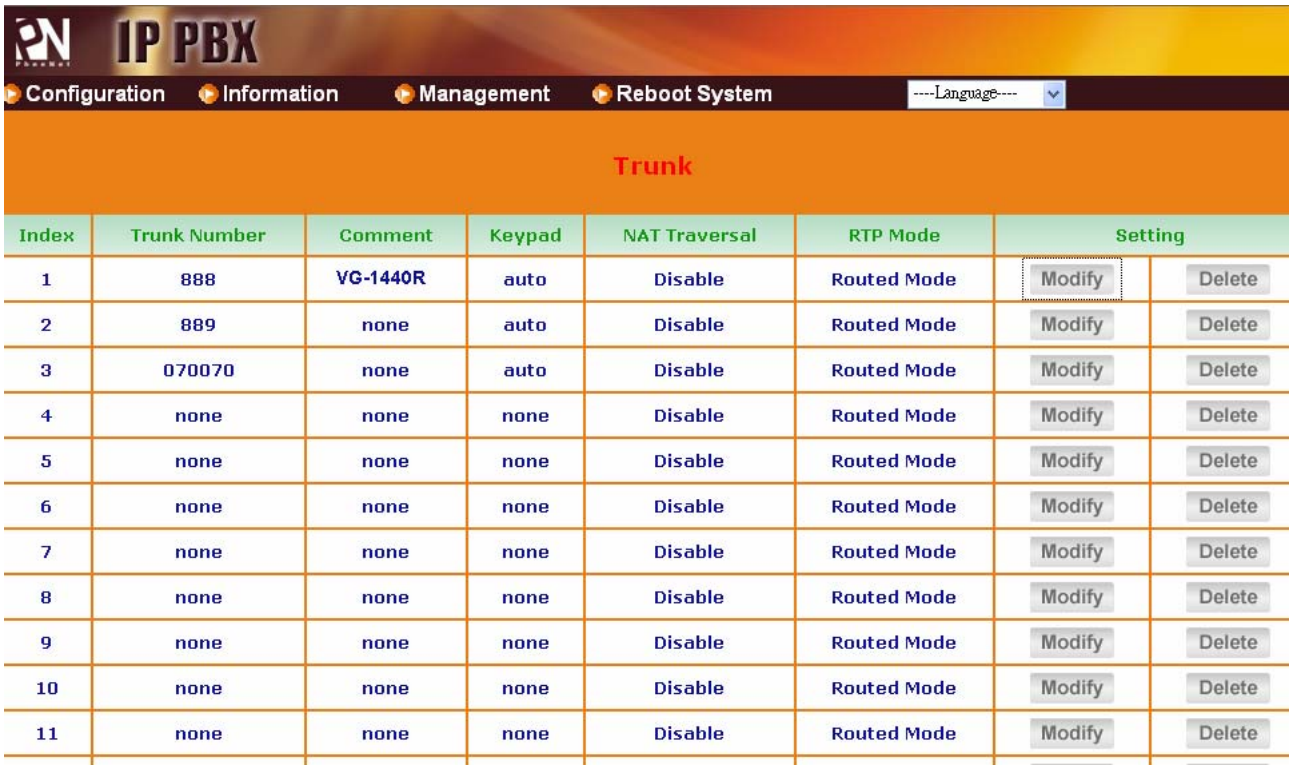
- Set IP information for VG-1440R. You can set the IP info of VG-1440R by its COM port, or you can also login its WEB interface by default IP 10.1.1.3. Go to **Network Interface** page to setup network setting as below. After set the network info, please press OK → Commit Data → Reboot System. For more information about VG-1440R, please go to: http://www.pheenet.com



Step2: Prepare Trunk number for VG-1440R

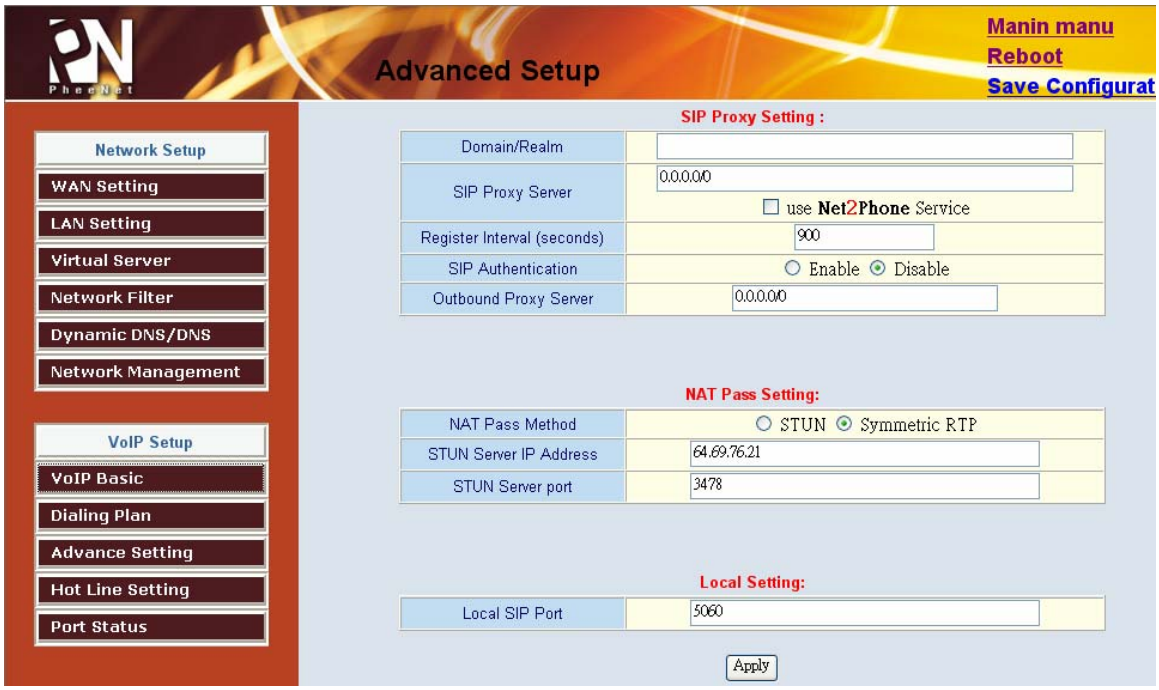


- In IPBX-011 / IPBX-011CF, prepare Trunk accounts for VG-1440R. (There are 2 default Trunks, 888 and 889, so we use the default setting for this Example) For more information about Trunk page, please go to user's manual CH3- Full Web Configurations.

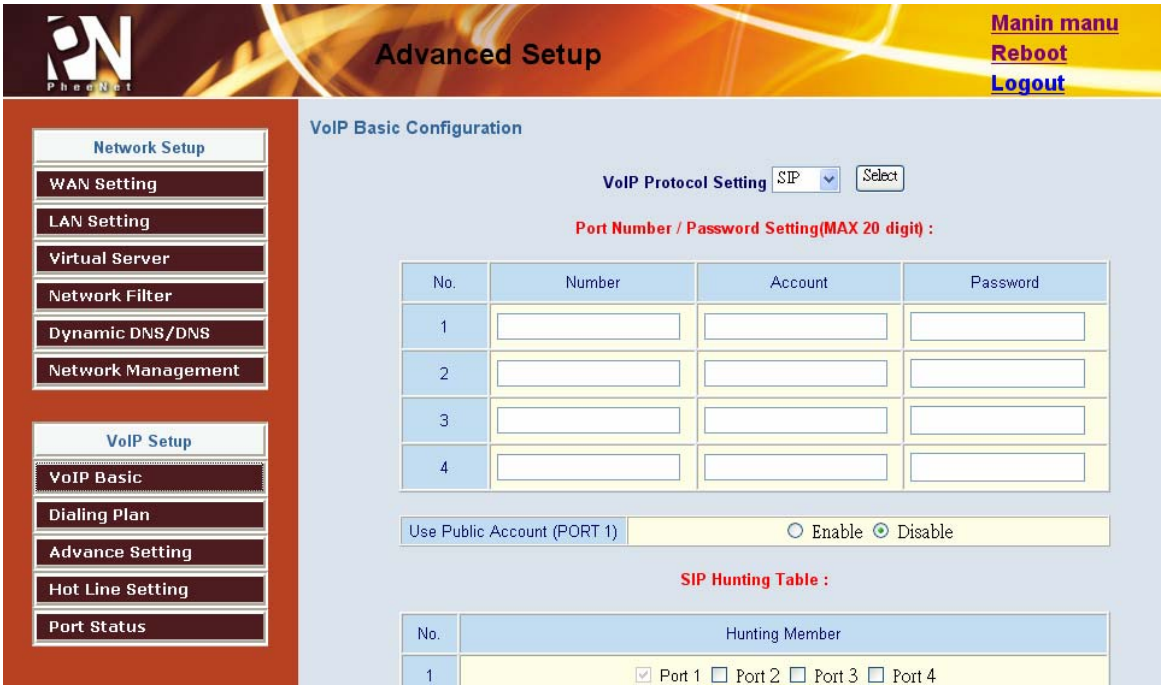

IP PBX
Configuration
Information
Management
Reboot System
----Language----
Trunk
Index
Trunk Number
Comment
Keypad
NAT Traversal
RTP Mode
Setting
1 888 VG-1440R auto Disable Routed Mode Modify Delete
2 889 none auto Disable Routed Mode Modify Delete
3 070070 none auto Disable Routed Mode Modify Delete
4 none none none Disable Routed Mode Modify Delete
5 none none none Disable Routed Mode Modify Delete
6 none none none Disable Routed Mode Modify Delete
7 none none none Disable Routed Mode Modify Delete
8 none none none Disable Routed Mode Modify Delete
9 none none none Disable Routed Mode Modify Delete
10 none none none Disable Routed Mode Modify Delete
11 none none none Disable Routed Mode Modify Delete

Step3: Setup Trunk for VG-1440R

- This Example, we have 1 VG-1440R register to IPBX-011 / IPBX-011CF with Trunk number 888. You can set the SIP Information of VG-1440R by its COM port or you can also login its WEB interface for configuration as below. Go to **SIP Config** page to set the VG-1440R as Proxy mode (or Gateway mode), Primary Proxy IP Address and line number (If you set the VG-1440R to Proxy mode, you should set line number for all of the line1 to line4. If you set the VG-1440R to Gateway mode, you can just only set line1 number). Go to **Security Config** page to input the registered account (If you set the VG-1440R to Proxy mode, you should set Account for all of the line1 to line4. If you set the VG-1440R to Gateway mode, you can just only set line1 Account). After configure, please press OK → Commit Data → Reboot System. For more information about VG-1440R, please go to: http://www.pheenet.com.

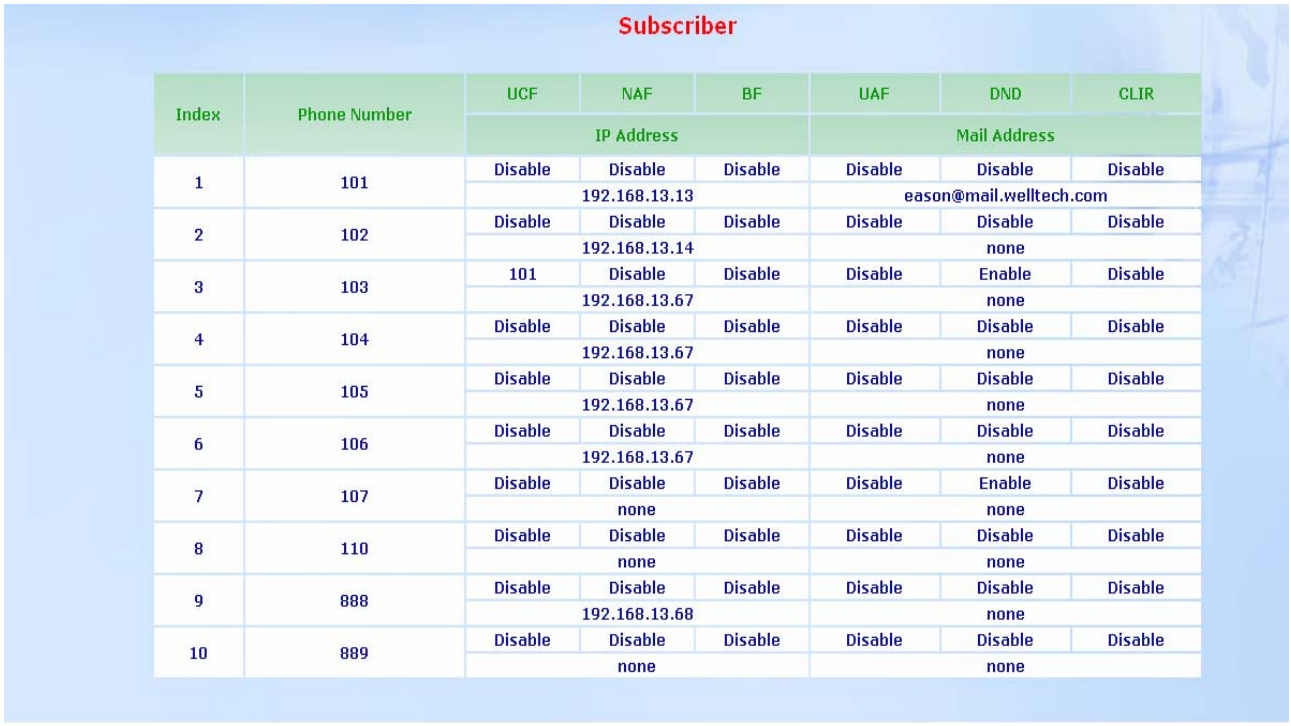


Set VG-1440R to Proxy Mode, and also set the line number for line1 to line4.



Set Account and Password for VG-1440R

- If all of the above settings are correct, you can go to **Information → Subscriber** page to confirm the register status.



Subscriber

Index	Phone Number	UCF	NAF	BF	UAF	DND	CLIR
		IP Address			Mail Address		
1	101	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.13			eason@mail.welltech.com		
2	102	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.14			none		
3	103	101	Disable	Disable	Disable	Enable	Disable
		192.168.13.67			none		
4	104	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.67			none		
5	105	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.67			none		
6	106	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.67			none		
7	107	Disable	Disable	Disable	Disable	Enable	Disable
		none			none		
8	110	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		
9	888	Disable	Disable	Disable	Disable	Disable	Disable
		192.168.13.68			none		
10	889	Disable	Disable	Disable	Disable	Disable	Disable
		none			none		

- There are also some other necessary configuration of VG-1440R to compatible with IPBX-011 / IPBX-011CF. But these settings do not exist in WEB interface, only exist in command line. Below is an example for command line.

Configuration of FXO

usr/config$ ifaddr –ip 192.168.13.68 –mask 255.255.248.0 –gate 192.168.13.254

(set IP address for VG-1440R)

usr/config$ sip –px 192.168.13.95 (set VG-1440R to register IPBX-011 / IPBX-011CF)

usr/config$ sip –line1 888 –line2 888 –line3 888 –line4 888 (set line number)

usr/config$ security –line 1 –name 888 –pwd 888

usr/config$ security –line 2 –name 888 –pwd 888

usr/config$ security –line 3 –name 888 –pwd 888

usr/config$ security –line 4 –name 888 –pwd 888 (set ID and Password)

usr/config$ sysconf –silence 0 (disable CNG function)

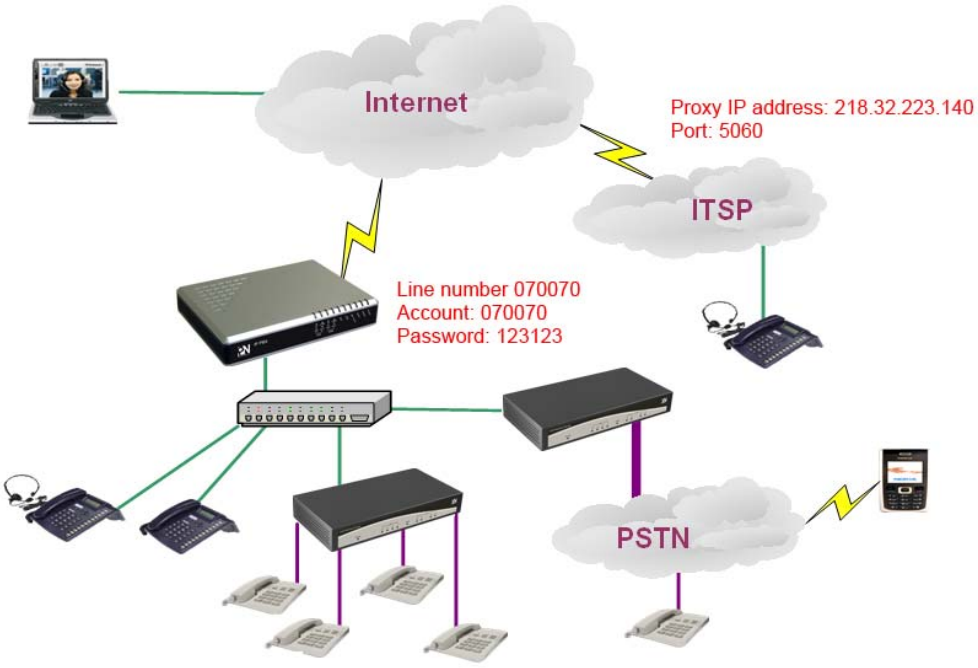
You must disable CNG of VG-1440R due to the IPBX-011 / IPBX-011CF does not support CNG, otherwise there will be some voice error occurred. Command is "sysconf –silence 0". When you disable CNG, please remember to commit and reboot your VG-1440R. For more information about VG-1440R, please go to: http://www.pheenet.com.

5.1.4 IPBX-011 / IPBX-011CF can register to ITSP as a SIP-Trunk.

IPBX can register to another ITSP as a SIP trunk. So that the Subscriber of ITSP can contact with IPBX-011 / IPBX-011CF and IPBX-011 / IPBX-011CF can call to ITSP.

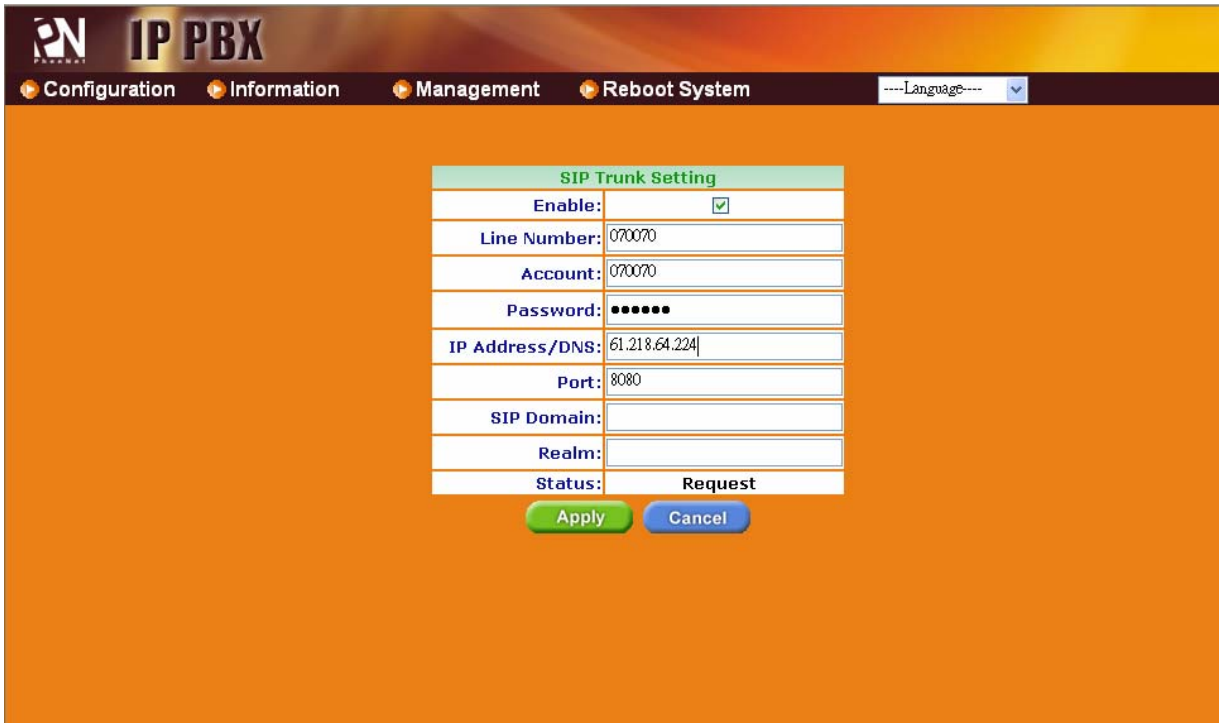
Step1: Obtain register account

- We got an account from ITSP with “Line number 070070, Account: 070070, Password: 123123”. And the proxy address of ITSP is 218.32.223.140, port 5060. Maybe the ITSP also need to provide **“Realm”**, so you should also input Realm for the SIP Trunk, otherwise the call from IPBX-011 / IPBX-011CF to ITSP may be rejected. For more information about **“Realm”**, please contact with your ITSP.



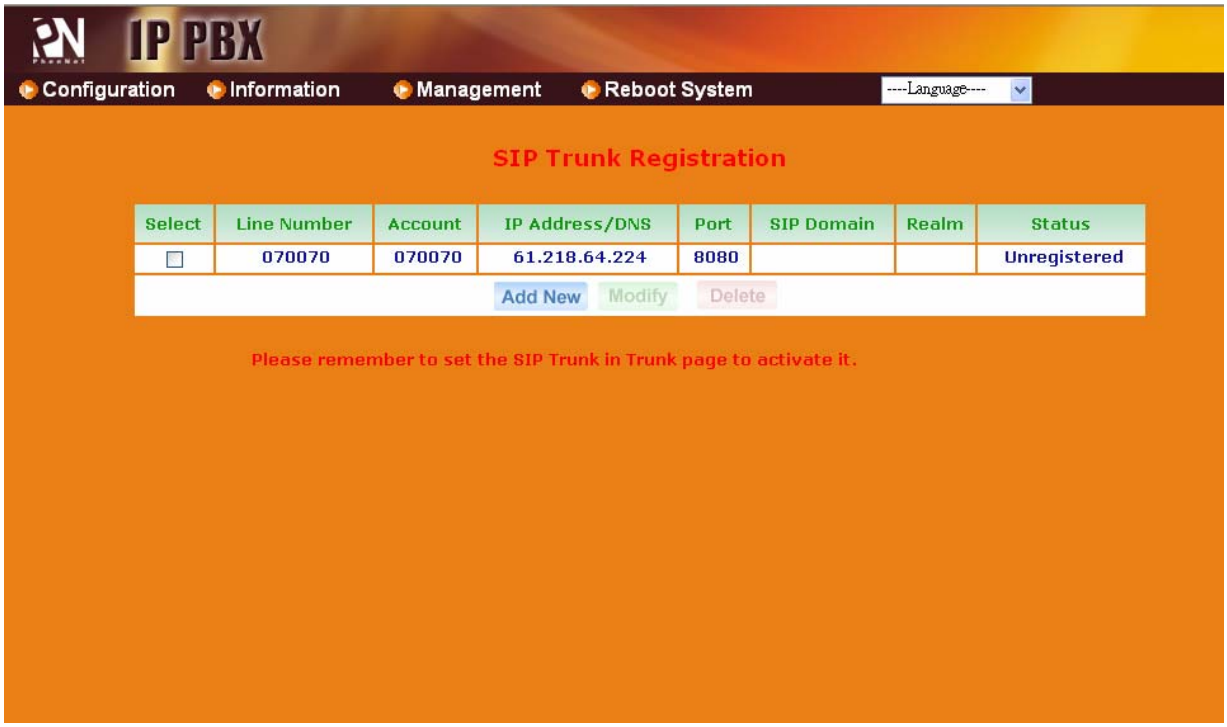
Step2: Set IPBX-011 / IPBX-011CF to register ITSP.

- Input the necessary information in SIP Trunk Reg. page. In this example, our “Realm” is empty due to our ITSP does not need Authentication for incoming call. For more information about SIP Trunk, please go to user’s manual CH3- Full Web Configurations.



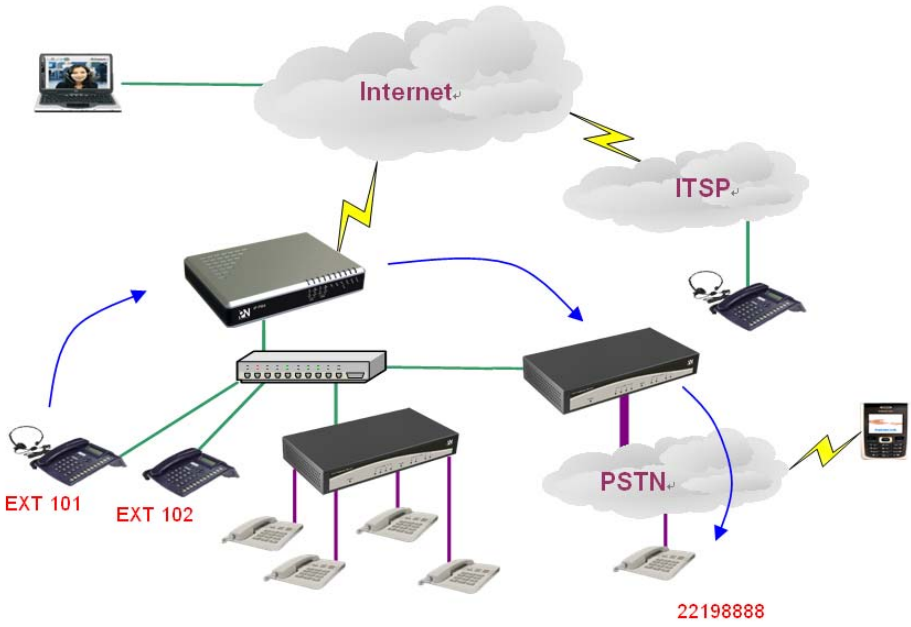
Step3: Confirm the register status of SIP Trunk

- Please confirm the register status. If the Status shows Registered, which means SIP Trunk registration is OK.



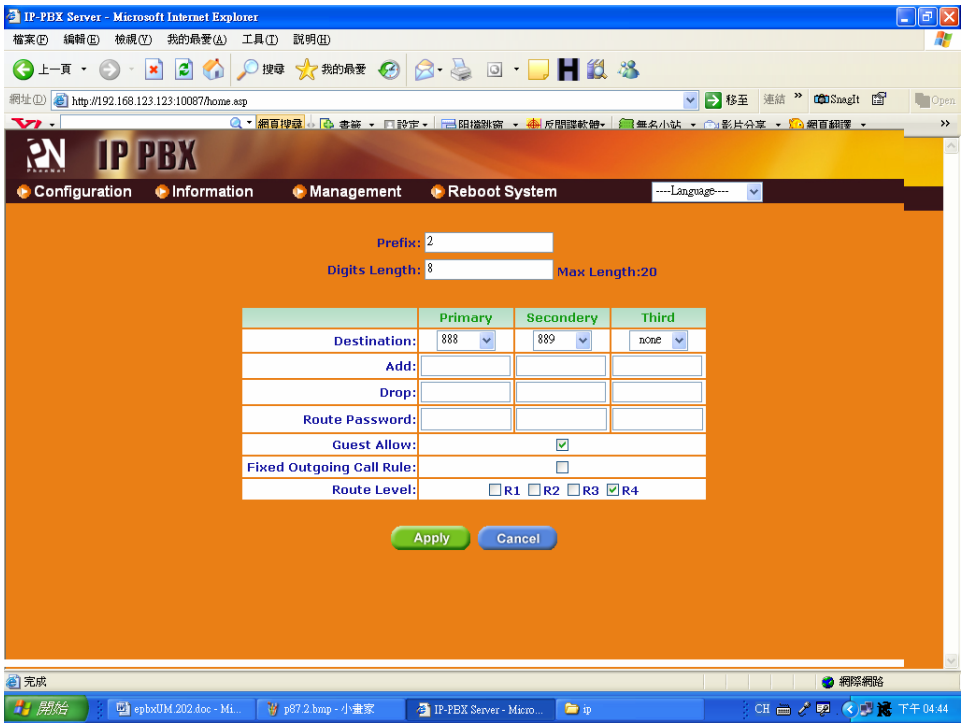
5.1.5 All of the Extensions can call out to local PSTN via VG-1440R.

Now the FXO is registering to IPBX-011 / IPBX-011CF, and we hope the extensions can call out to local PSTN via the FXO gateway. The VG-1440R should connect with local PSTN line. We should set the routing table to let the IPBX-011 / IPBX-011CF route the call to VG-1440R if the called number is a local PSTN number.



Step1: Set Prefix route in Routing Table page

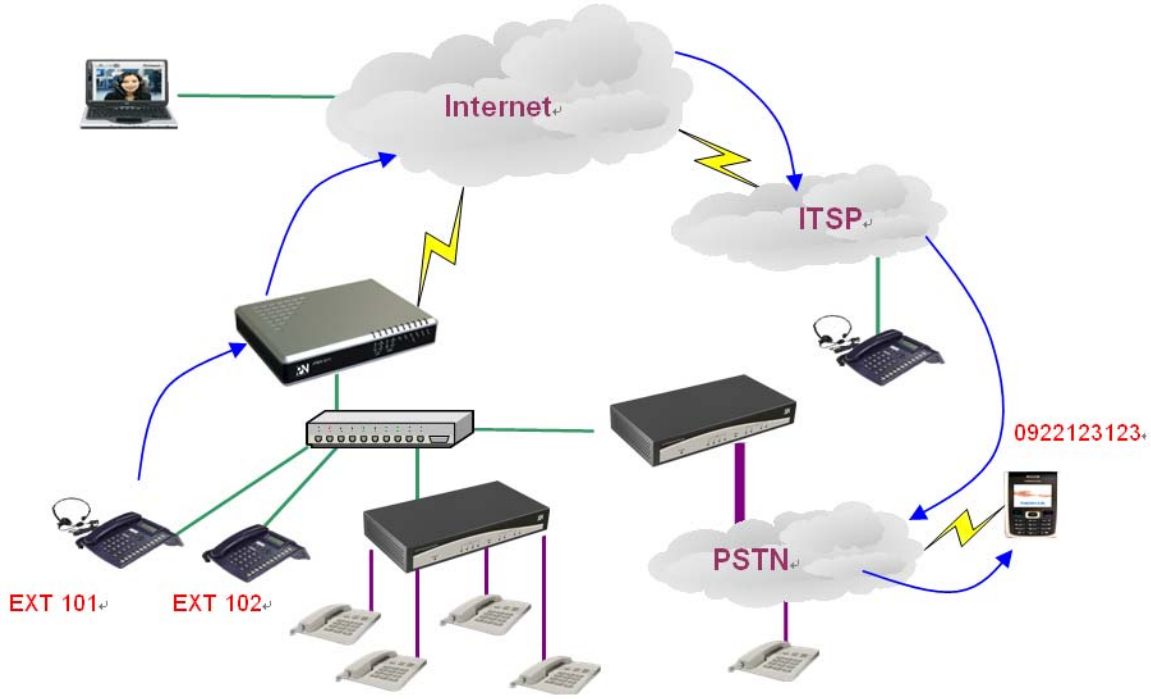
- Please Go to Routing Table Page to set Prefix route, so that the Extensions can dial to local PSTN 22198888 via VG-1440R (888). The setting just like below. For more information about Routing Table, please go to user's manual CH3- Full Web Configurations.



Now the Extensions can dial to 22198888 via VG-1440R.

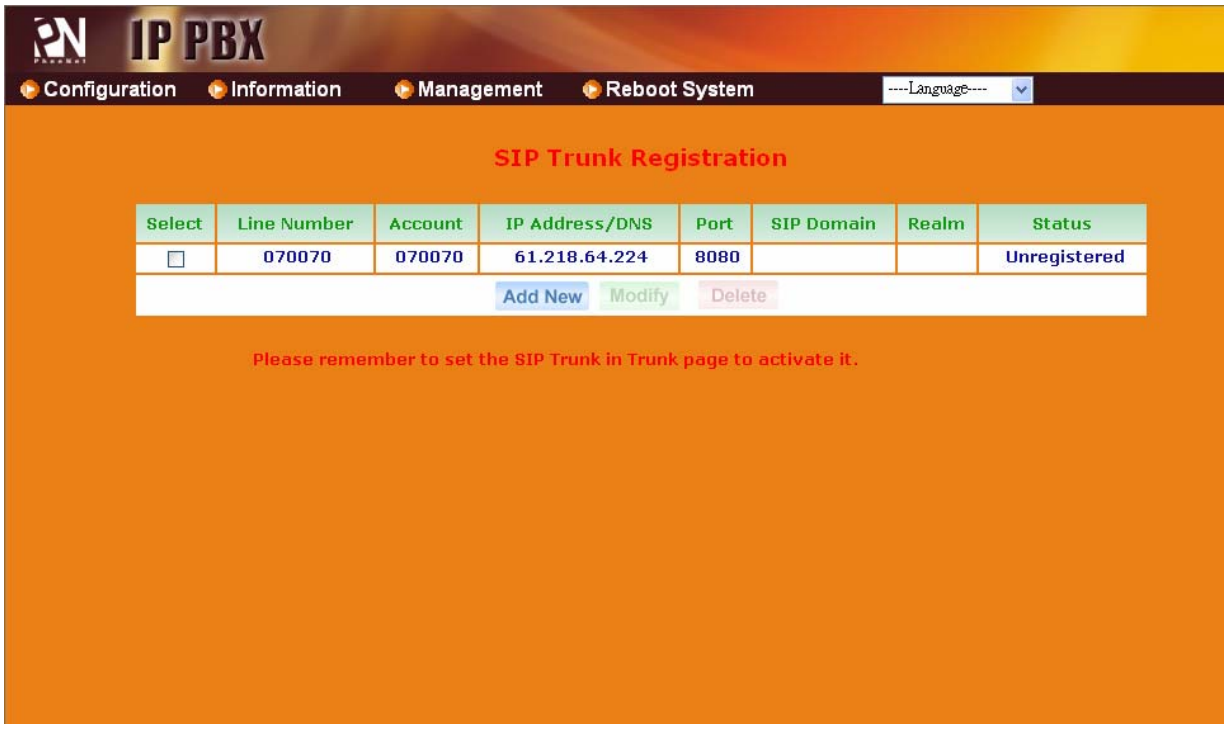
5.1.6 All of the Extensions can call out to Mobile Phone via ITSP.

Now we set IPBX-011 / IPBX-011CF to register an account 070070 to an ITSP, and we hope the outbound call with mobile phone number should be route to ITSP to reduce the cost.



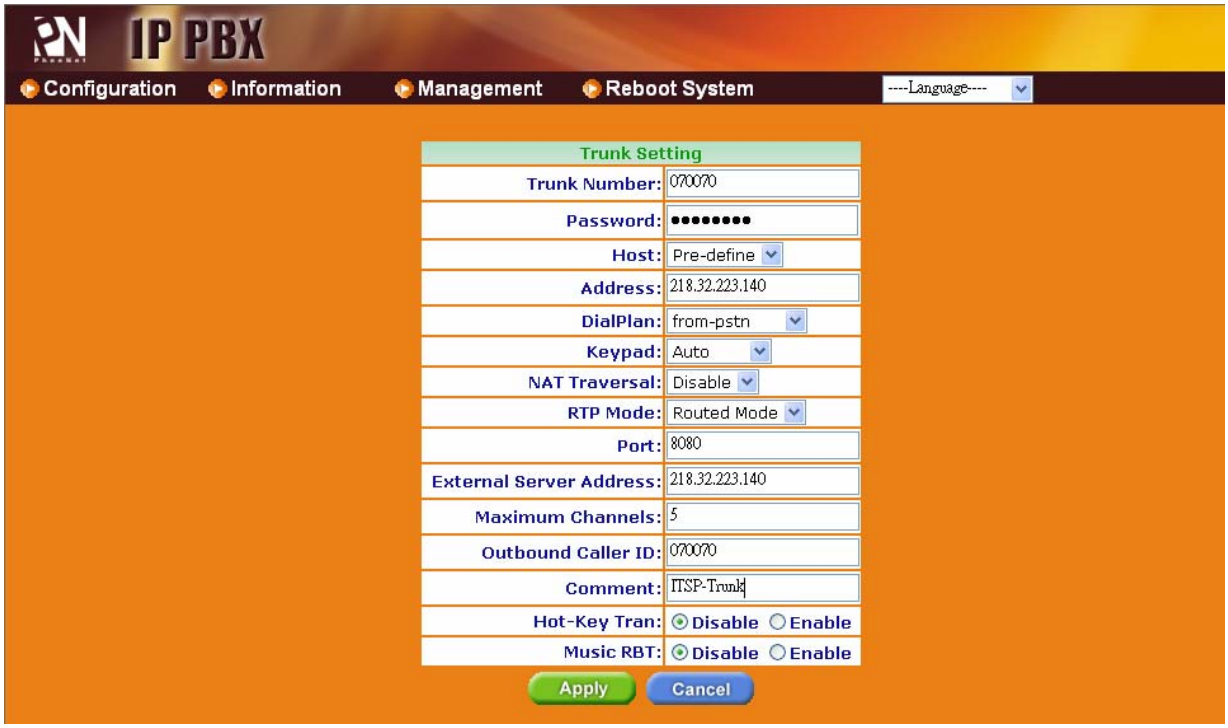
Step1: Confirm the IPBX-011 / IPBX-011CF register to ITSP successfully

- Please Go to SIP Trunk Page to confirm the registered status of SIP Trunk. The Status must display “Registered”

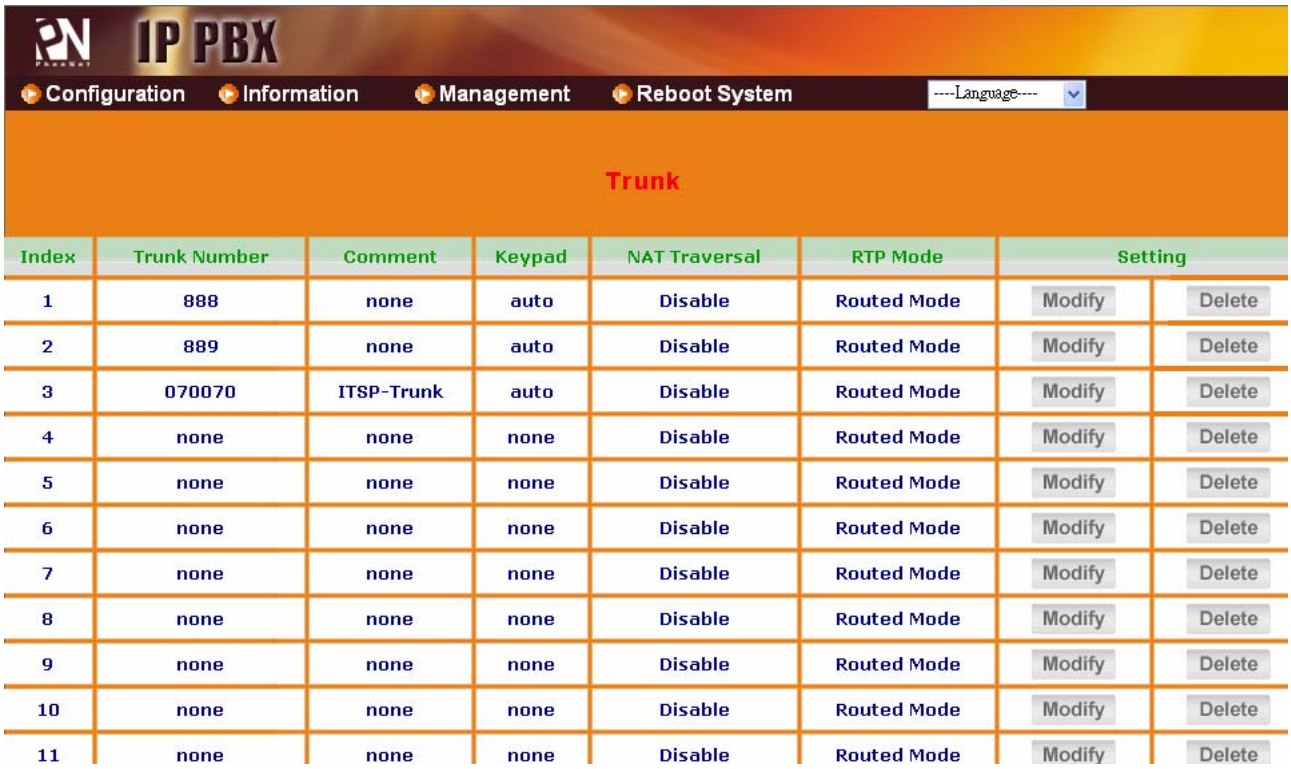


Step2: Set SIP Trunk ID in Trunk page to activate SIP Trunk.

- In SIP Trunk Page, we only set the IPBX-011 / IPBX-011CF to register ITSP. Now, we want to activate SIP Trunk (ITSP), so we should go to Trunk page to add a new Trunk for SIP Trunk (ITSP). For more information about the relationship between SIP Trunk page and Trunk page, please go to user’s manual CH3- Full Web Configurations.



Activate SIP Trunk (ITSP) in Trunk Page.

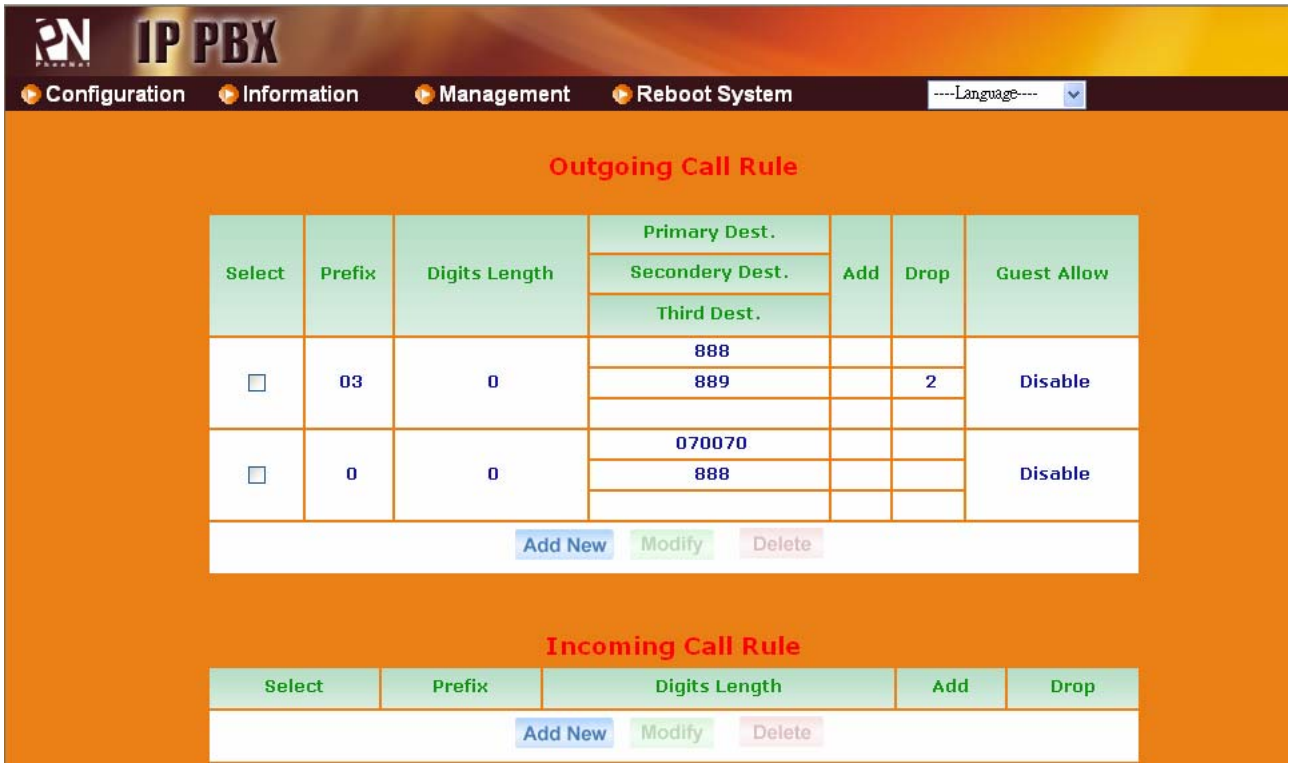

IP PBX
Configuration
Information
Management
Reboot System
----Language----
Trunk
Index
Trunk Number
Comment
Keypad
NAT Traversal
RTP Mode
Setting
1 888 none auto Disable Routed Mode Modify Delete
2 889 none auto Disable Routed Mode Modify Delete
3 070070 ITSP-Trunk auto Disable Routed Mode Modify Delete
4 none none none Disable Routed Mode Modify Delete
5 none none none Disable Routed Mode Modify Delete
6 none none none Disable Routed Mode Modify Delete
7 none none none Disable Routed Mode Modify Delete
8 none none none Disable Routed Mode Modify Delete
9 none none none Disable Routed Mode Modify Delete
10 none none none Disable Routed Mode Modify Delete
11 none none none Disable Routed Mode Modify Delete

In Trunk page, you should find there a new record 070070.

Step3: Set Prefix route in Routing Table page

- Please Go to Routing Table Page to set Prefix route, so that the Extensions can dial to Mobile Phone 0922123123 via ITSP. For more information about Routing Table, please go to user's manual CH3- Full Web Configurations.

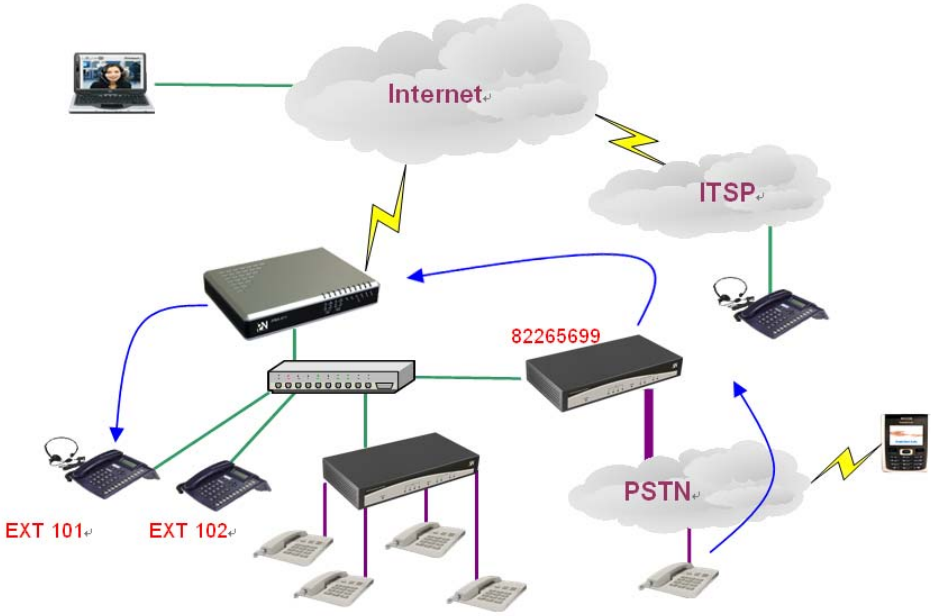
In this example, we set prefix to 0 and there is not limit for digits length (0). The first destination is ITSP and 2nd destination is VG-1440R (888). And we also set the Routed Password for this prefix route.



Confirm the Outgoing Call Rule. Now the Extensions can dial to 0922123123 to reach mobile phone via ITSP. If extension called out with prefix number 0, the IPBX-011 / IPBX-011CF will play an announcement for route password, after input the correct password, then IPBX-011 / IPBX-011CF will dial to destination.

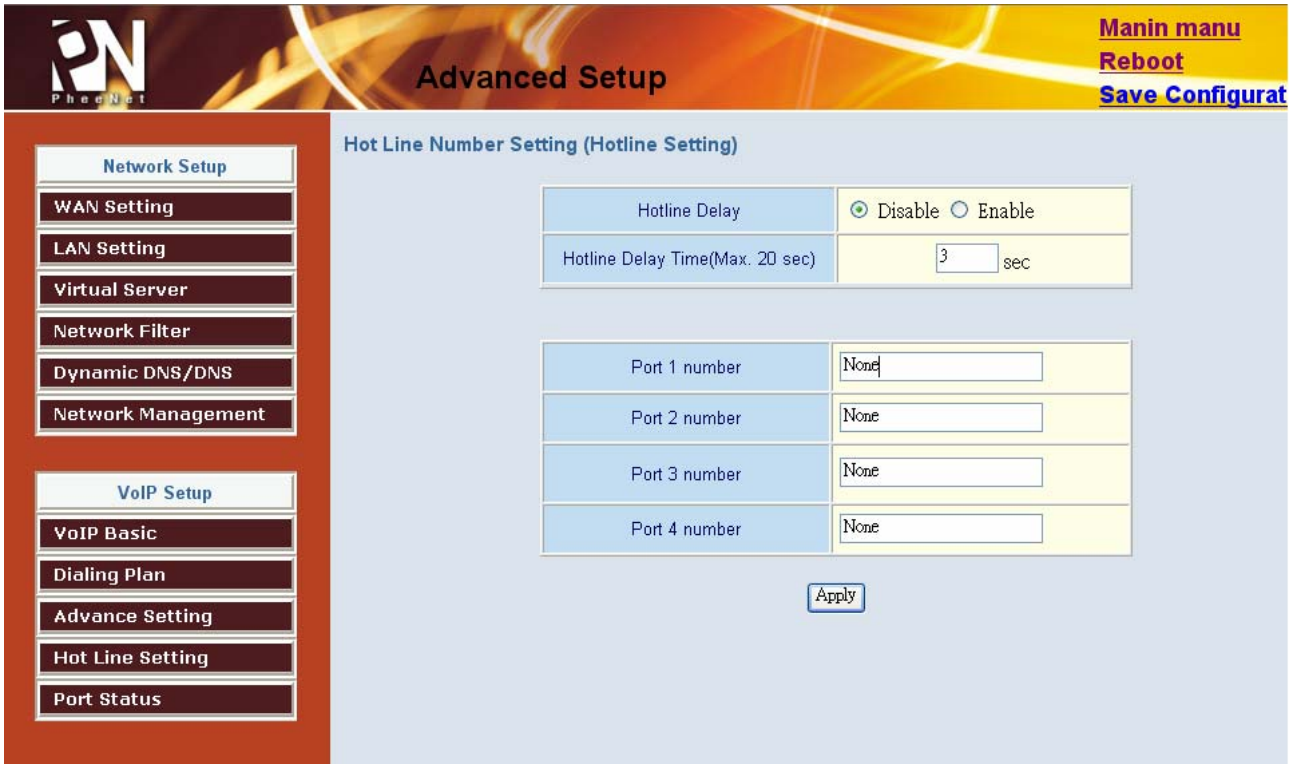
5.1.7 User in PSTN side should be able to contact with Extensions via VG-1440R

We hope the IPBX-011 / IPBX-011CF can play as an Auto Attendant, so that the user in PSTN side can contact with the Extensions. In this example, the FXO gateway connect with local PSTN line (82265699), we hope the PSTN caller can dial to 82265699 then contact with Ext 101.



Step1: Set hotline function in your VG-1440R.

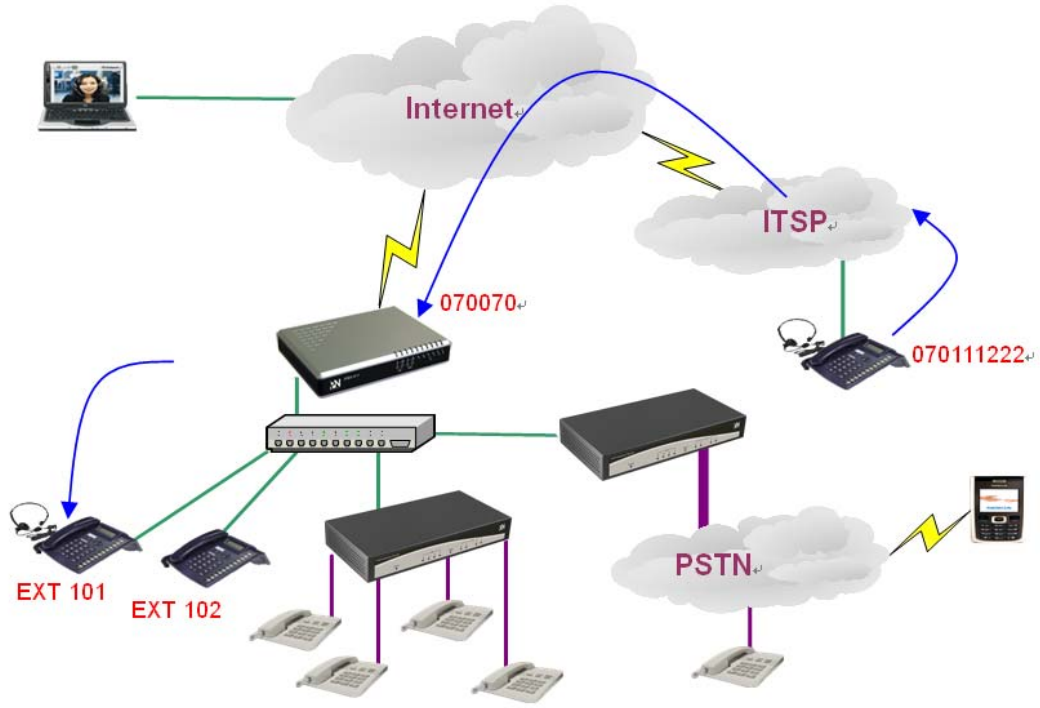
- The default auto attendant number of IPBX-011 / IPBX-011CF is **999. So you should set hotline function of VG-1440R. When VG-1440R got a PSTN incoming call, it should dial to **999 directly. In below picture, we set line1 to line3 hotline to **999 and we set line4 hotline to EXT 102.



Now, if FXO port1 got a PSTN incoming call, it will hotline to auto attendant, and caller will hear a greeting then dial extension number. If port4 got a PSTN incoming call, VG-1440R will dial to EXT102 directly.

5.1.8 User in ITSP side should be able to contact with Extensions

070111222 is a subscriber of ITSP, we hope 070111222 can also contact with extension of IPBX-011 / IPBX-011CF.



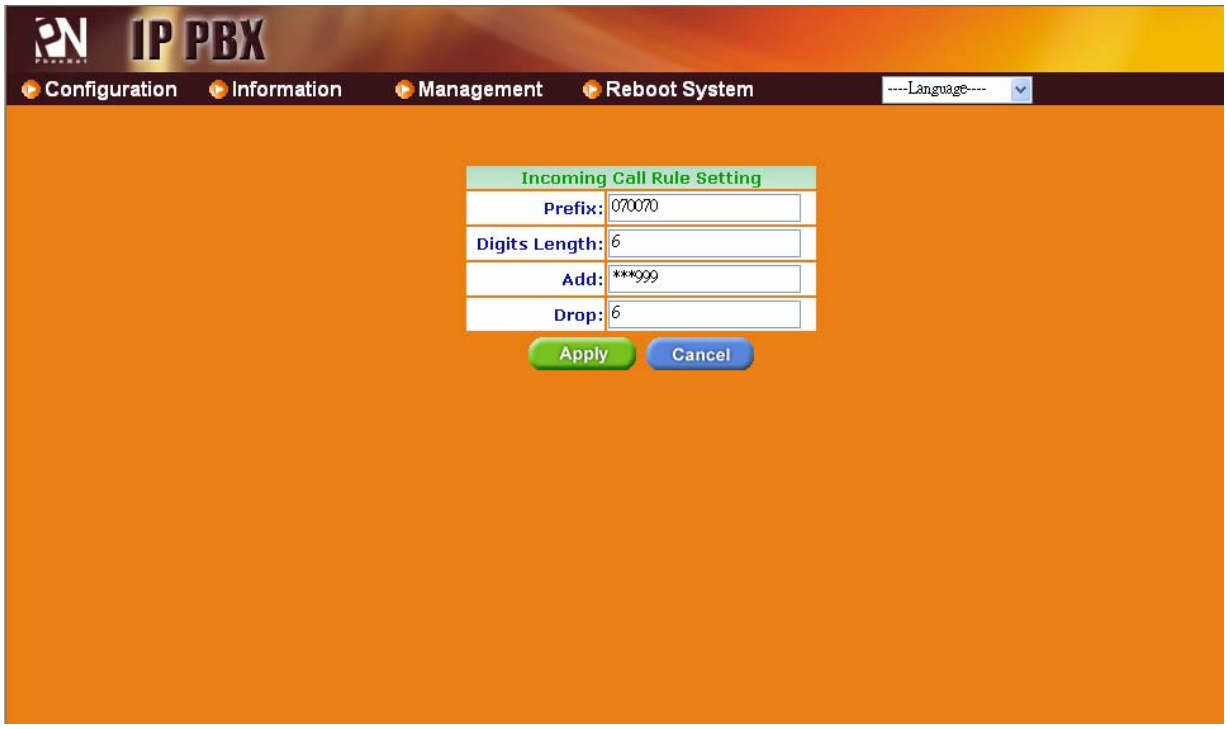
Step1: Confirm the IPBX-011 / IPBX-011CF register to ITSP successfully

- Please Go to SIP Trunk Page to confirm the registered status of SIP Trunk. The Status must display “Registered”

Step2: Set incoming call rule

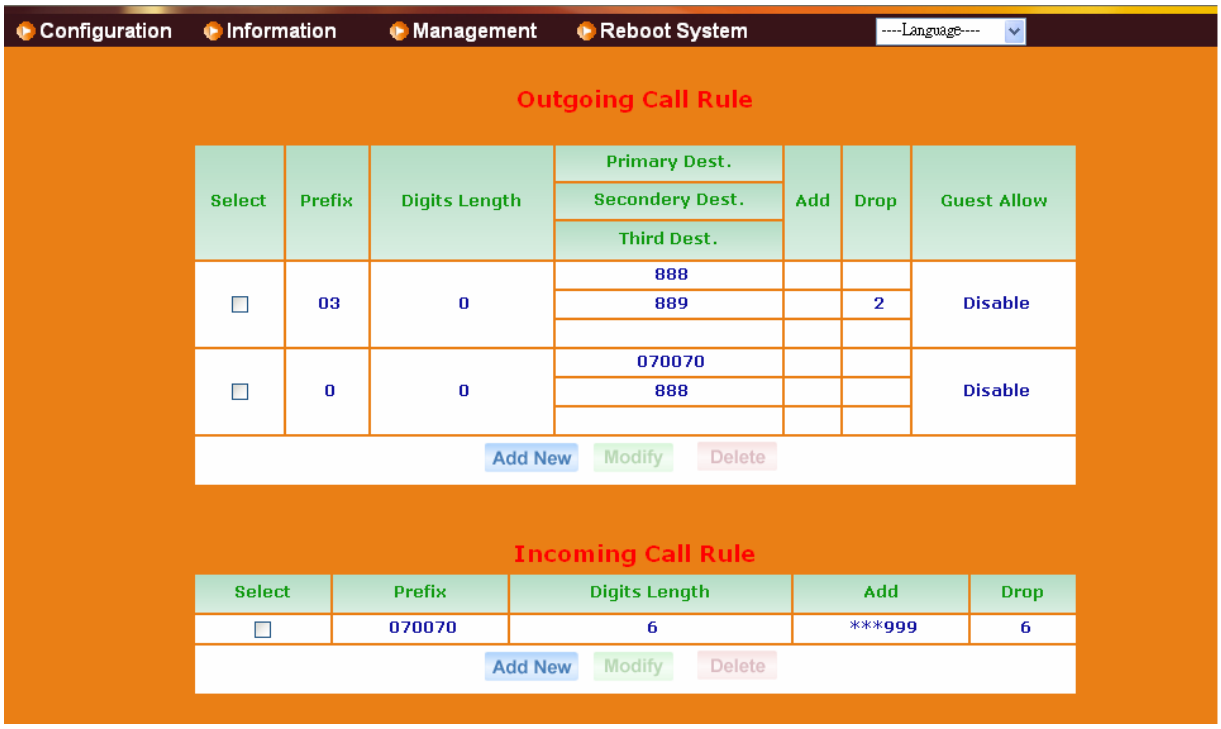
- Please Go to Routing Table page to set incoming call. If IPBX-011 / IPBX-011CF got an incoming

call with number 070070, it should play a greeting so that 070111222 can continue to dial EXT 101.



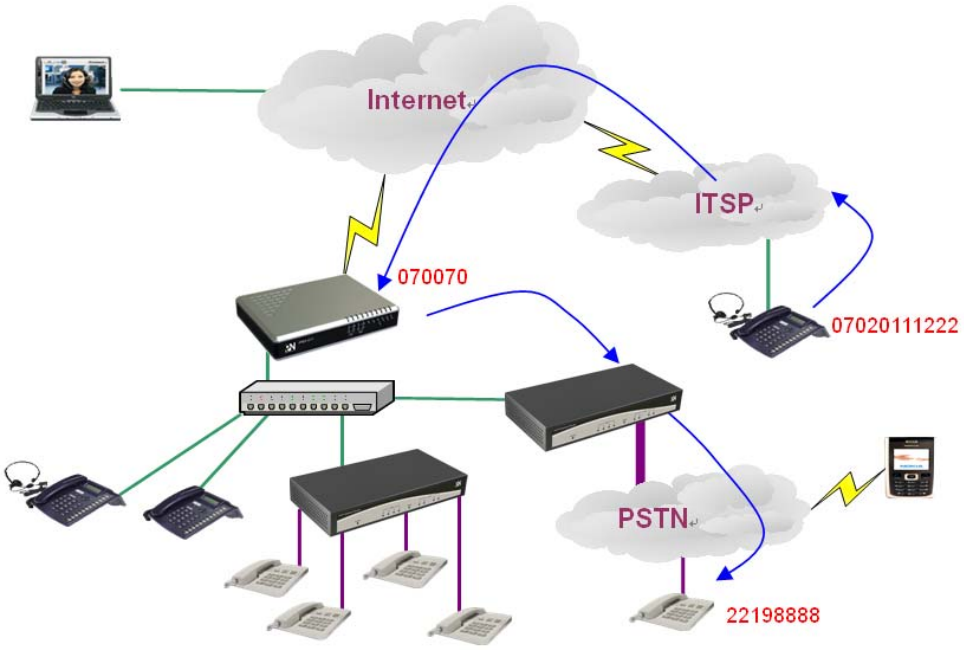
We set the incoming call rule with Prefix 070070 and Digits Length 6. When IPBX-011 / IPBX-011CF got a called number with 070070, it will drop 6 digits and add **999.

- Now, if IPBX-011 / IPBX-011CF got an incoming call from ITSP with number 070070, IPBX-011 / IPBX-011CF will dial to **999 (auto attendant). Then the caller can continue to dial the Extension.



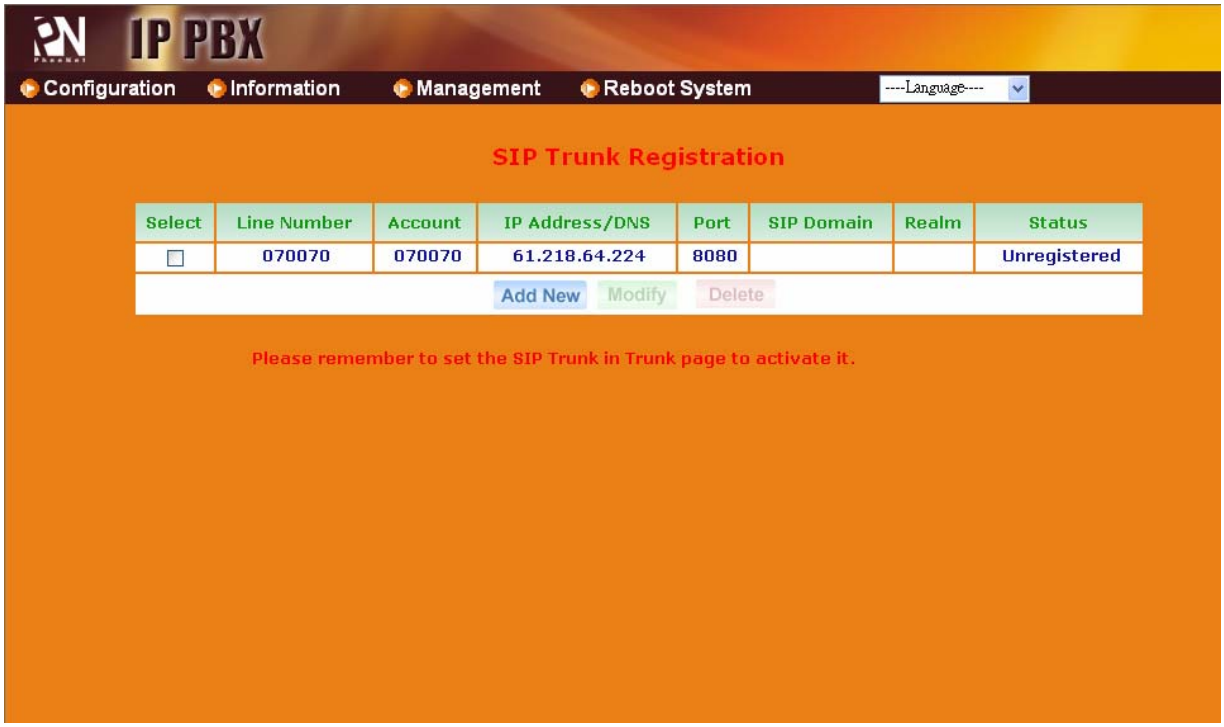
5.1.9 User in ITSP side can call out to local PSTN via VG-1440R

Now, 070111222 can reach auto attendant. We hope 070111222 can dial to local PSTN 22198888 via VG-1440R.



Step1: Confirm the IPBX-011 / IPBX-011CF register to ITSP successfully

- Please Go to SIP Trunk Page to confirm the registered status of SIP Trunk. The Status must display “Registered”

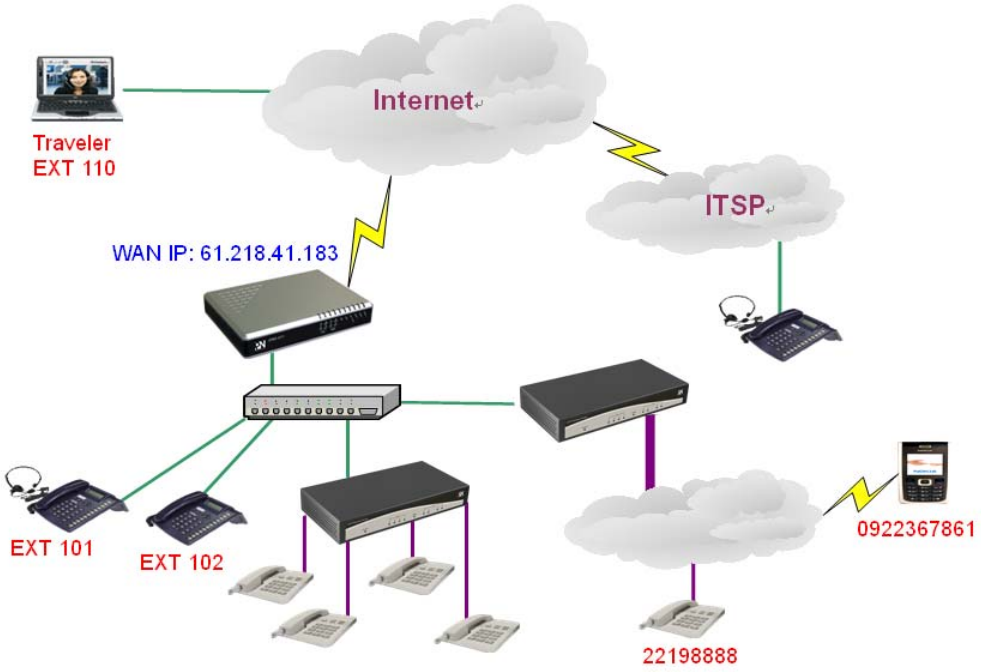


Step2: Enable Guest Allow

- In the prefix route of outgoing call rule, we should enable Guest Allow, so that the user can redial destination.

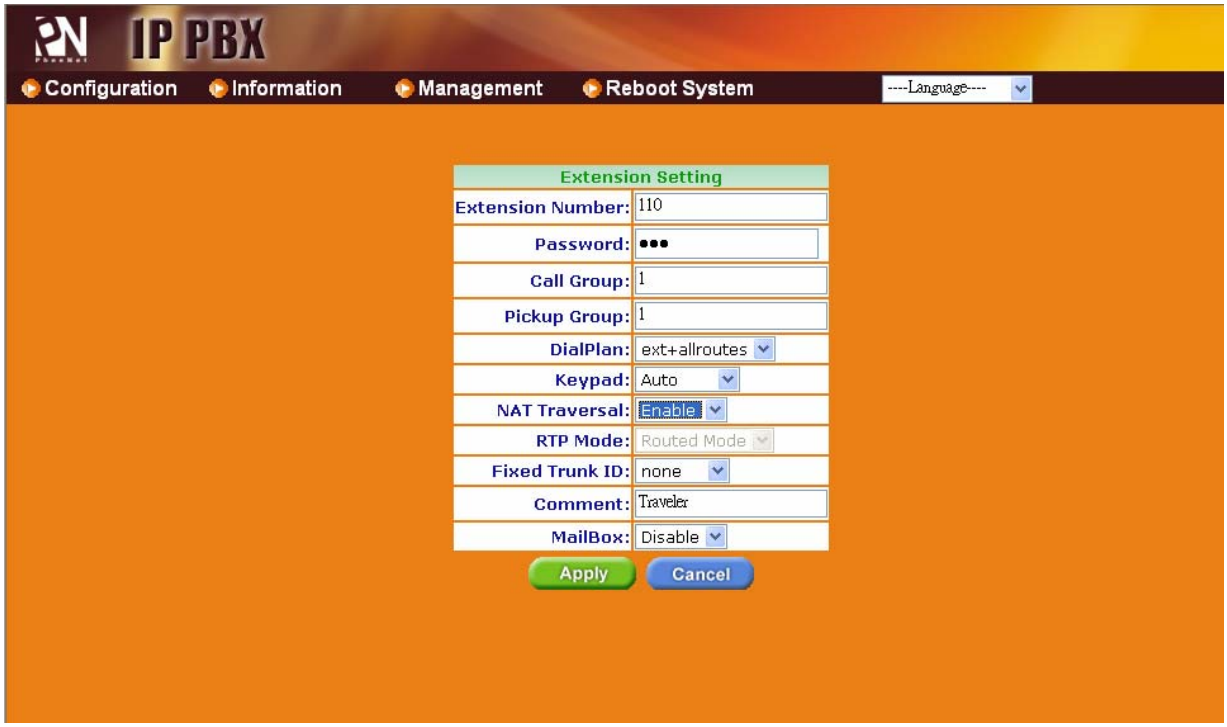
User in ITSP side can reach the auto attendant (**999) when they dial to 070070 now, because we already set incoming call rule in Routing Table page. Now, they can redial to 22198888 because we enable Guest Allow. For more information about Guest Allow, please go to user's manual CH3- Full Web Configurations.

5.1.10 Traveler can call back to EXT, and Traveler can also call to local PSTN and Mobile phone number



Step1: Create account for the Traveler

- The Traveler has a business trip and she is using the customer's network. Maybe she is under "Private IP". We should enable "NAT Traversal" for her. So that she can contact with the other Extension and she can also use the routing table of IPBX-011 / IPBX-011CF.



Step2: Set register account for Traveler

- The Traveler may use a USB phone or Soft Phone to contact with the other Extensions. In the settings of Soft Phone, she need to set the proxy address to: 61.218.41.183 (it is the WAN IP of IPBX-011 / IPBX-011CF), and she also needs to set the line number/ account/ and password for her Soft Phone. Below is an example.

- If all of the above settings are correct, you can go to **Information → Subscriber** page to confirm the register status.

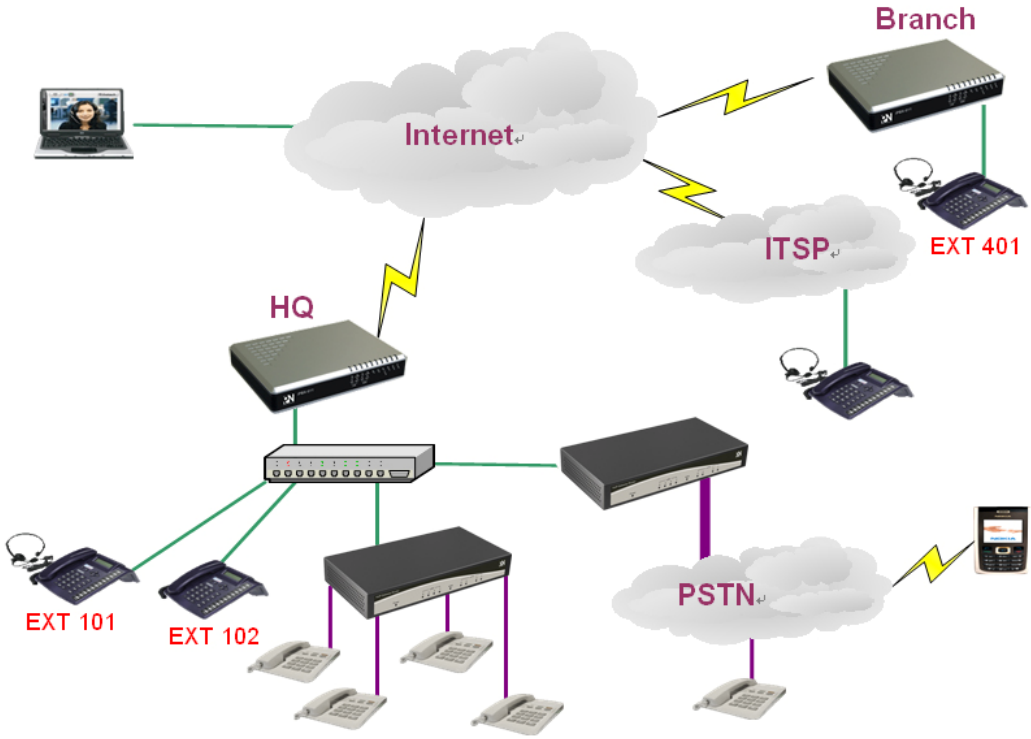
Subscriber

Index	Phone Number	UCF	NAF	BF	UAF	DND	CLIR
		IP Address			Mail Address		
1	101	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
2	102	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
3	103	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
4	104	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
5	105	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
6	106	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
7	107	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
8	108	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
9	109	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
10	110	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
11	888	Disable	Disable	Disable	Disable	Disable	Disable
		none				none	
		Disable	Disable	Disable	Disable	Disable	Disable

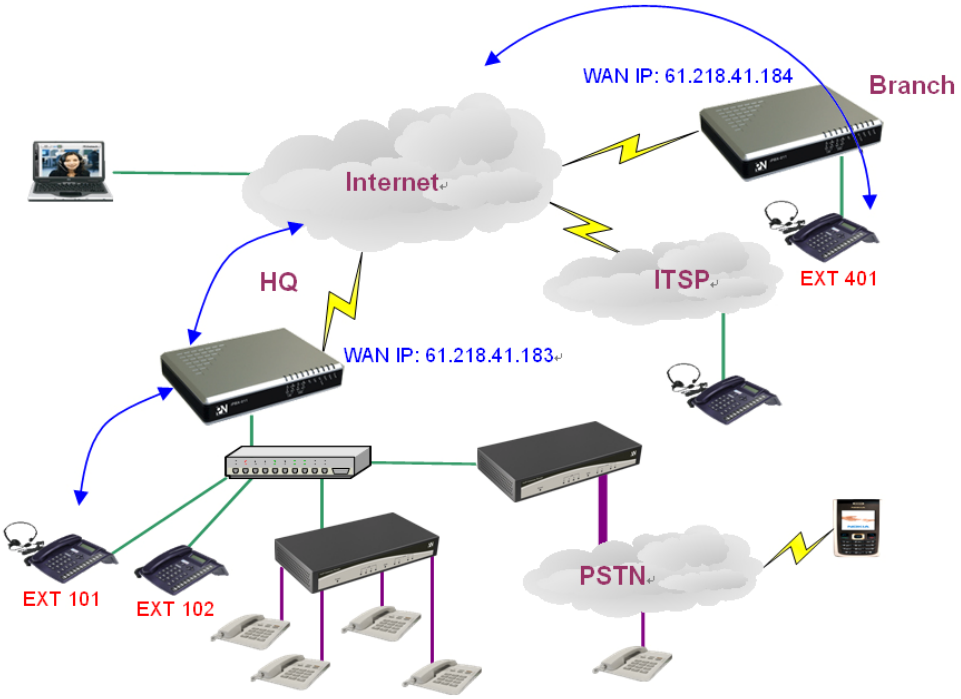
Now, the Traveler can contact with other Extension. If the called party is busy or no answer, IPBX-011 / IPBX-011CF will play an announcement to indicate the called party's status. The Traveler can also dial to local PSTN and Mobile phone due to you already set Routing Table.

5.2 Application of multiple IPBX-011 / IPBX-011CF

There are two IPBX in two locations, one is in HQ and another is in Branch. We hope both companies can call the extensions between each other. And we hope extensions in Branch can call PSTN via HQ.

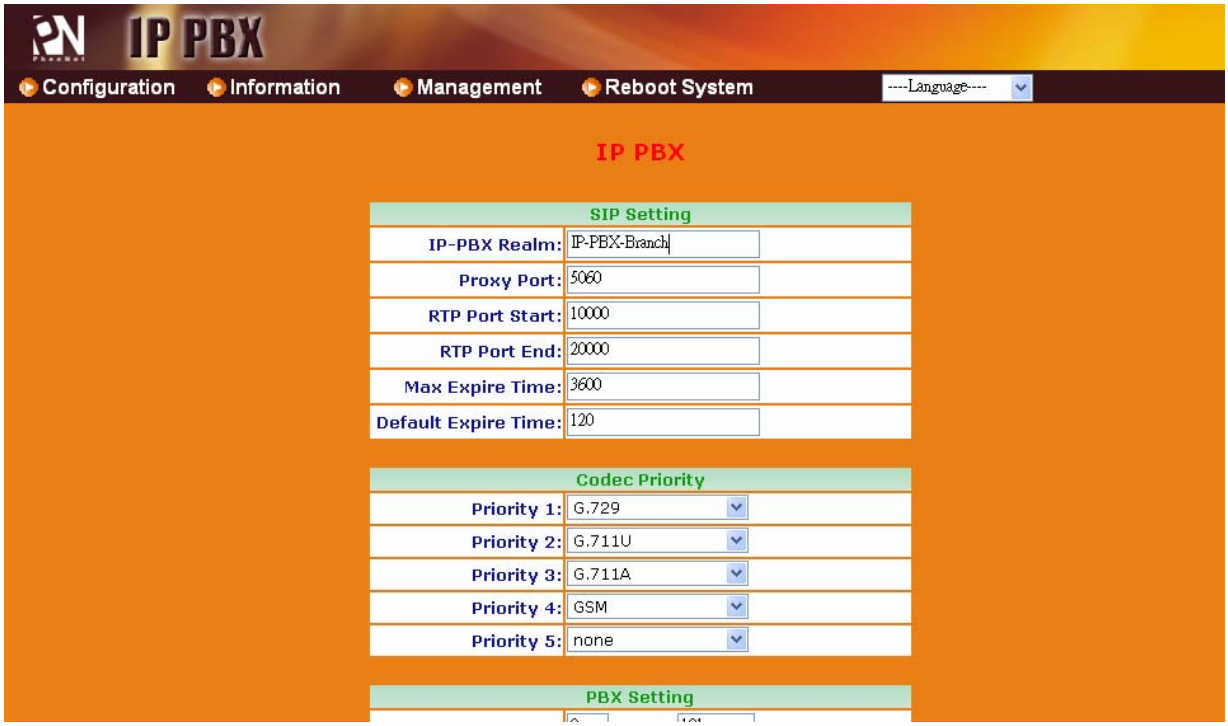


5.2.1 Multiple IPBX-011 and IPBX-011CF can call extensions between each other

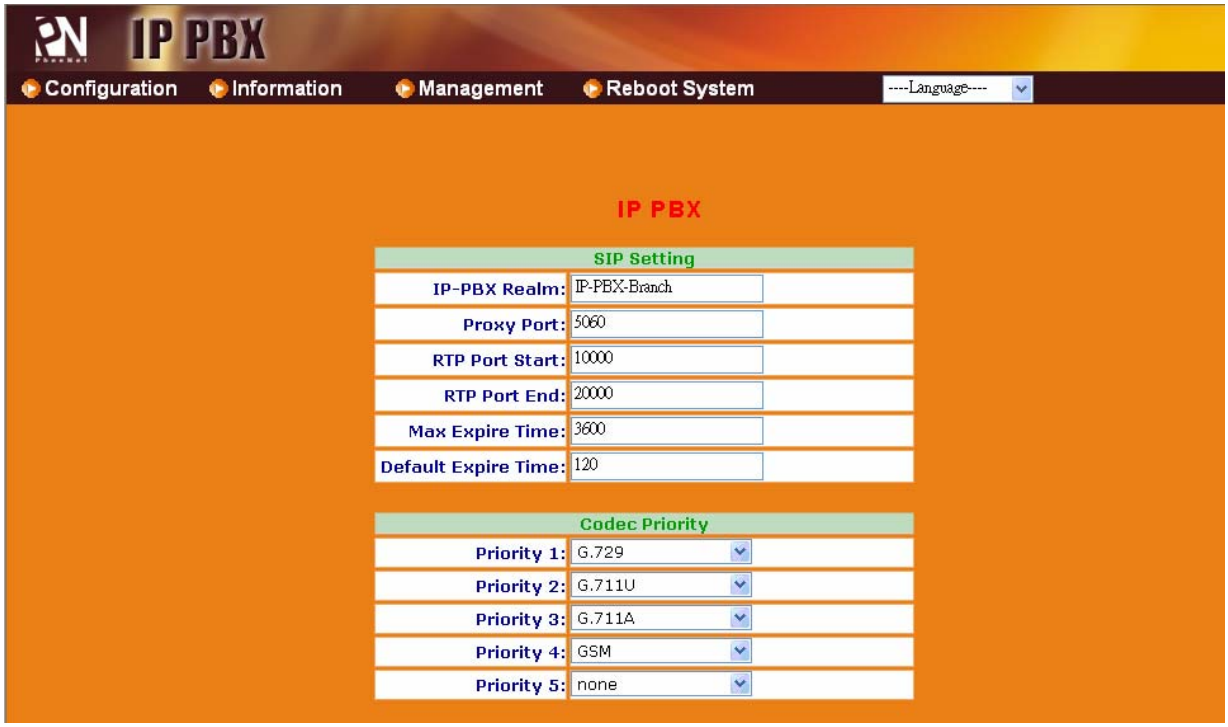


Step1: Set IP-PBX Realm

- Set IP-PBX Realm of HQ.

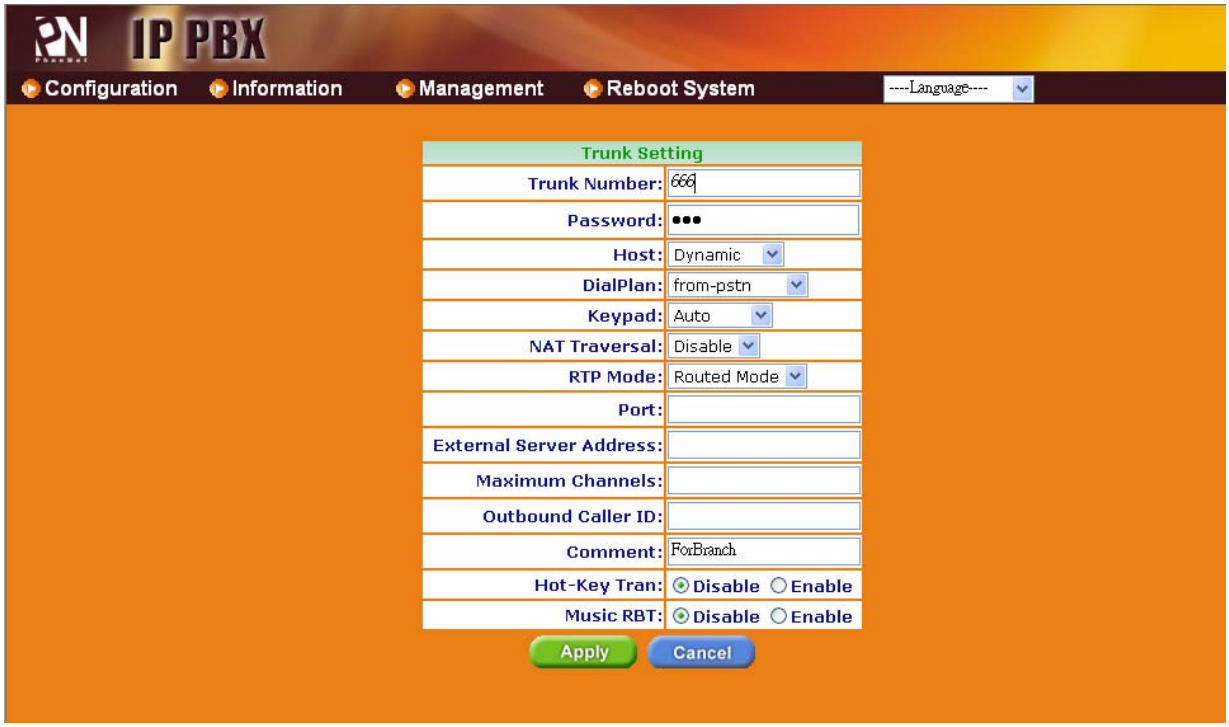


- Set IP-PBX Realm of Branch



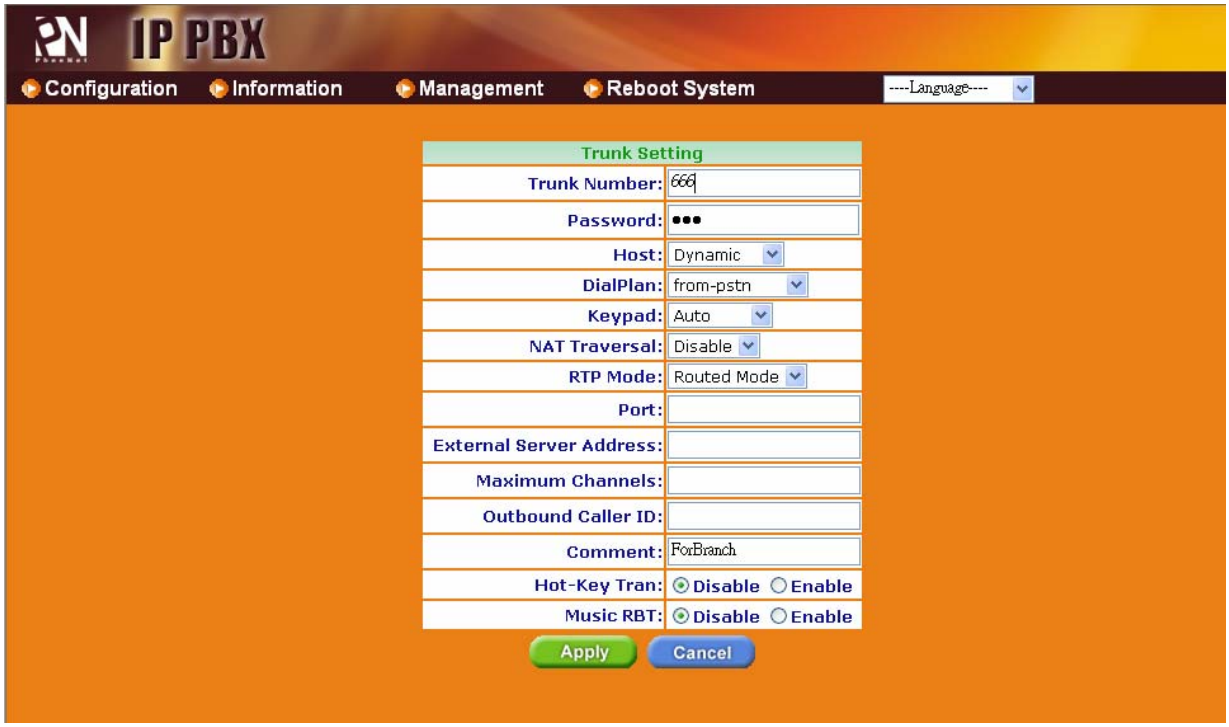
Step 2: Set Trunk Account

- In HQ, set Trunk account for Branch, so that Branch can register to HQ.



We suggest you to set the DialPlan to [ext+allroute]. That means the call from Branch can use all the resource of HQ.

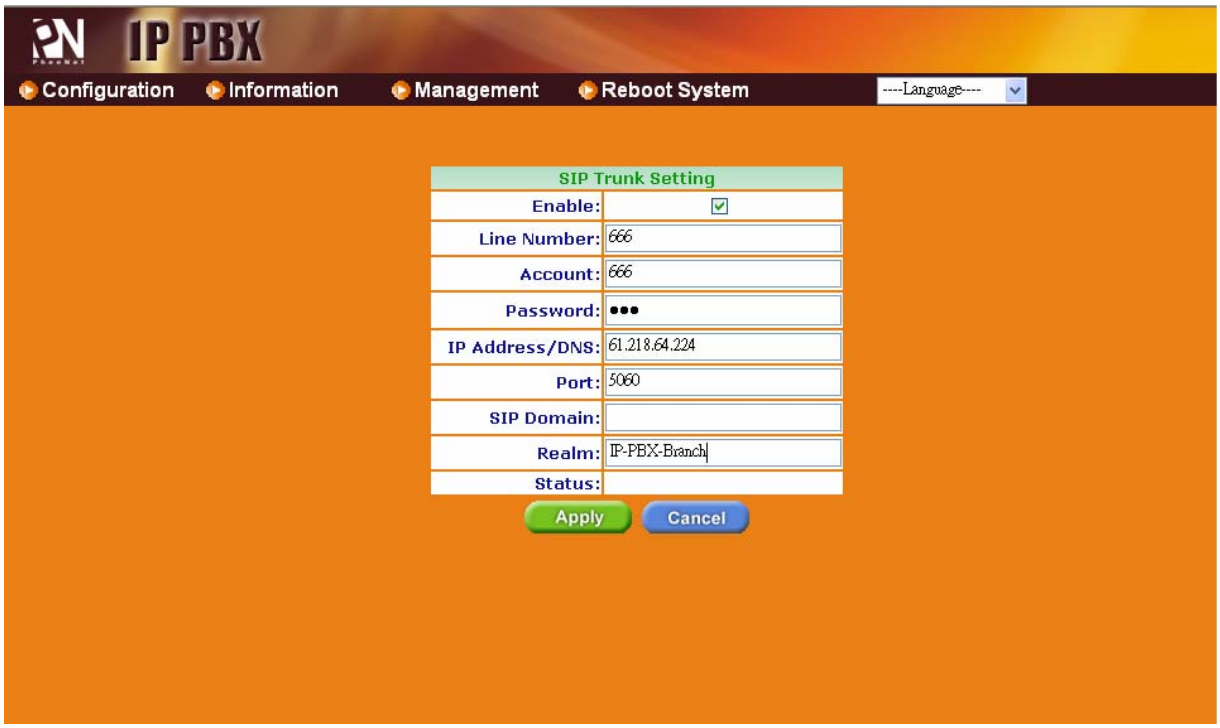
- In Branch, set Trunk account for HQ, so that HQ can register to Branch.



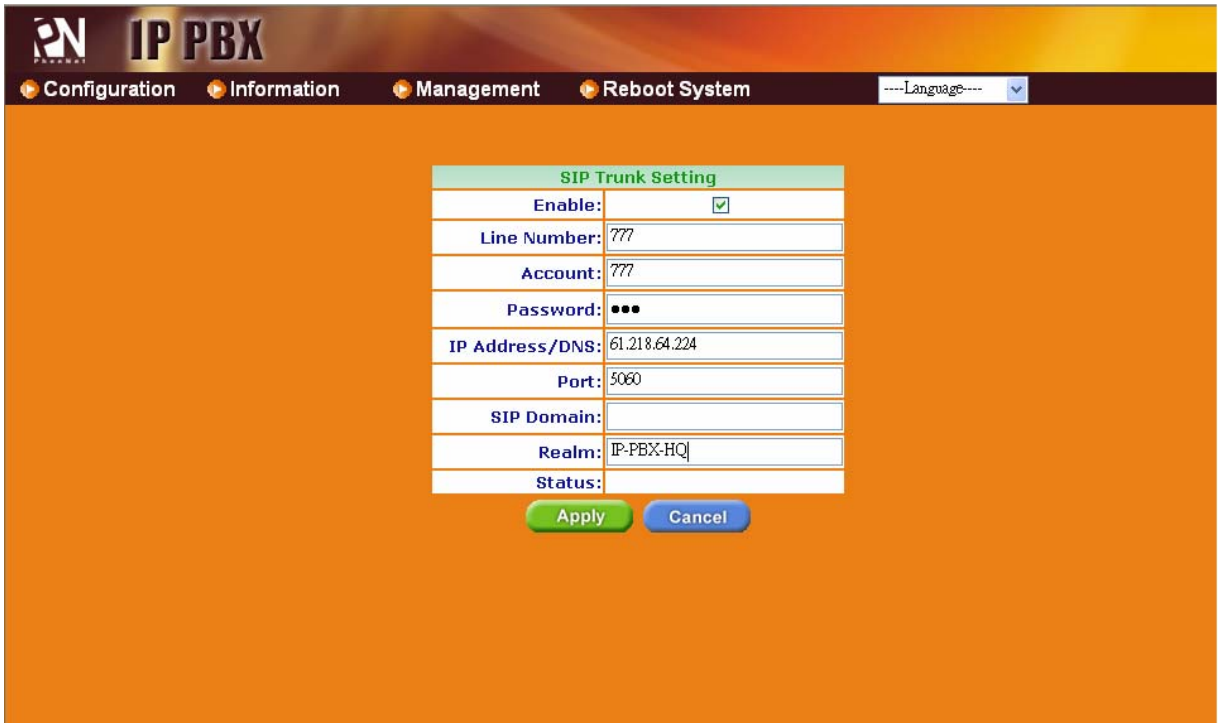
We suggest you to set the DialPlan to [ext+allroute]. That means the call from HQ can use all the resource of Branch.

Step 3: Register to each other.

- In HQ, register to Branch as below. **Remember to also set the Realm.**



- In Branch, register to Branch as below. **Remember to also set the Realm.**



Step 3: Set Routing Table.

- In HQ, set routing table as below. So the user in HQ can call extension 401 which is located in Branch.

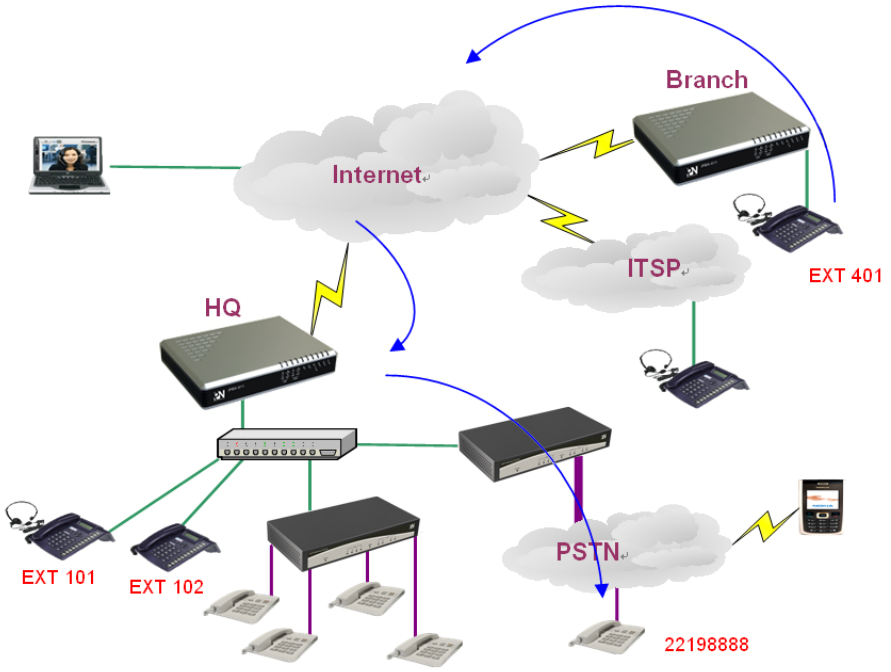
- In Branch, set routing table as below. So the user in Branch can call extension 101 or 102 which is located in Branch.

Now, the extensions of these two IPBX can call to each other.

There is an important thing you should pay attention. All the numbers of HQ and Branch should be unique. For example, there is an Extension 401 in branch. If you hope user in HQ can contact with 401 which located in Branch, there should not have any number equal to 401 in HQ, including Extension, Trunk, Dial Group…, etc.

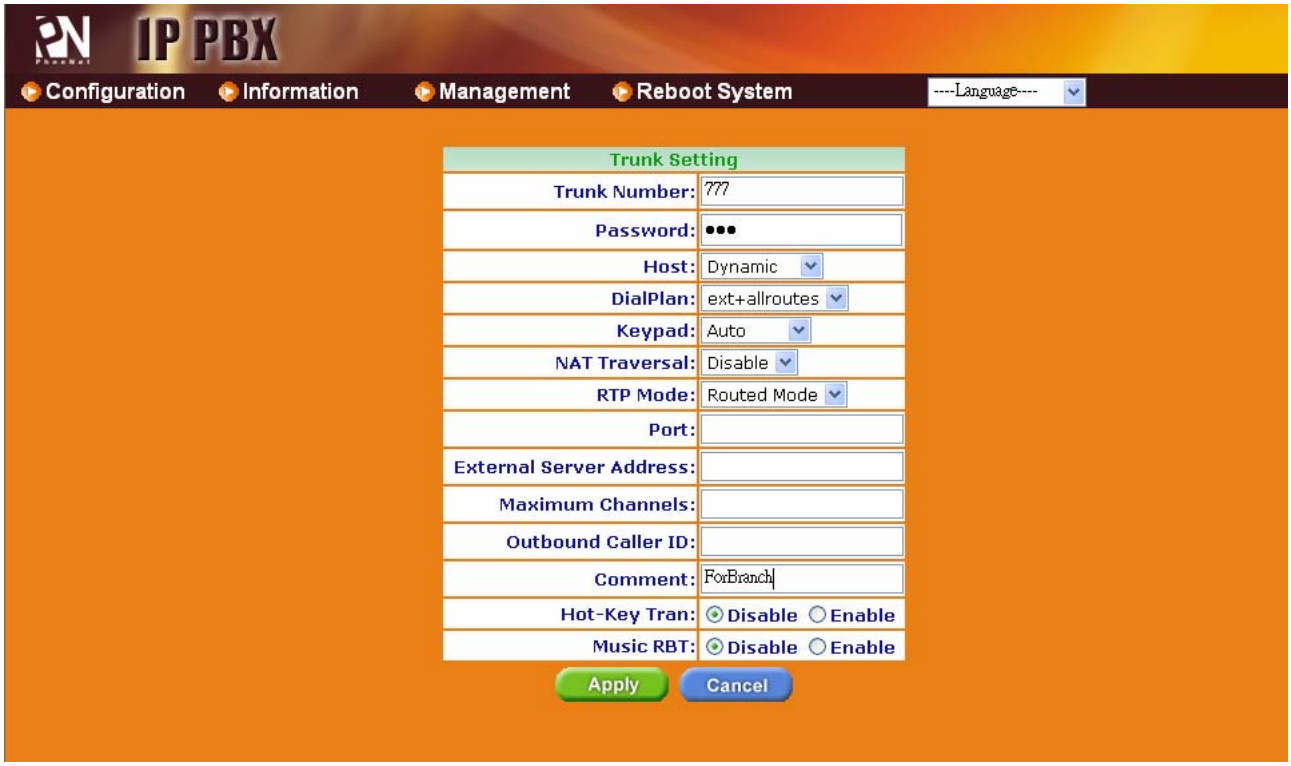
5.2.2 User in Branch can call to PSTN via HQ

Now, we hope Ext401 can call to PSTN 22198888 via HQ.



Step 1: Make sure the extensions in HQ can call 22198888 successfully. For more info, please refer to 5.1.5 All of the Extensions can call out to local PSTN via VG-1440R.

Step 2: In HQ, make sure you already set the Trunk ID for Branch to DialPaln= [Ext+Allroute]



Step 2: In Branch, set the routing table as below.

In Branch, if the called number is within prefix 2 and digits length is 8, such as 22198888, the call will be routed to HQ. HQ will confirm with the DialPlan then sent the call to FXO gateway (VG-1440R).

5.3 Voice Mail System Concept (For IPBX-011CF only)

IPBX-011CF has a CF card to store voice mail within itself. Below is an example when user login Voice Mail System.

(Press ＊ 98) to enter voice mail system → Input Mailbox number (vm-login.gsm) → Input password (vm-password.gsm) → It will announce incorrect message if login incorrect (vm-incorrect-mailbox.gsm)

You have (vm-youhave.gsm) 1 (digits/1.gsm) new (vm-INBOX.gsm) and 2 (digits/2.gsm) old (vm-Old.gsm) messages (vm-messages.gsm), press 1 for (vm-onefor.gsm) new (vm-INBOX.gsm) messages (vm-messages.gsm), press 2 to change folder, press 3 for Advance options, press 0 for mailbox option (vm-opts.gsm), press ＊ for help or # for exist (vm-helpexist.gsm).

Press 1 for new message: first message received at …….

3: advance option (vm-advopts.gsm)

1: send reply (vm-toreply.gsm) --- When you hear a new message, you can reply a message to the sender's voice mail if the user also enabled the voicemail box function.

3: hear the message envelope (vm-tohearenv.gsm) --- To hear the received time the sender's number.

5: leave message (vm-leavemeg.gsm) --- When you hear an old message, you can leave a message to the sender or another user's voice mail if the user also enabled the voicemail box function.

＊ return the main menu (vm-starmain.gsm)

4: previous message (vm-prev.gsm)

5: repeat current message (vm-repeat.gsm)

6: next message (vm-next.gsm)

7: delete or undelete current message (vm-delete.gsm) (vm-undelete.gsm)

8: forward this message to another user (vm-toforward.gsm)

1: prepend the message (vm-forwardoptions.gsm) --- When you listen a message, you can forward such message to another user, and you can leave your own message before the forwarding message

2: forward a message without prepending (vm-forwardoptions.gsm) --- forward the message to another user directly, without prepending.

9: to save this message (vm-savemessage.gsm)

Save to which folder? (vm-savefolder.gsm)

0: for new messages.

1: for old messages

2: for Work folder (vm-work.gsm)

3: for Family folder (vm-Family.gsm)

4: for Friends folder (vm-Friends.gsm)

#: to cancel (vm-tocancel.gsm)

* : help (vm-helpexist.gsm)

#: exist (vm-helpexist.gsm)

Press 2 to change folder:

Change to which folder? (vm-changeto.gsm)

0: for new messages.

1: for old messages

2: for Work folder (vm-work.gsm)

3: for Family folder (vm-Family.gsm)

4: for Friends folder (vm-Friends.gsm)

#: to cancel (vm-tocancel.gsm)

Press 3 for Advance options:

5: leave message (vm-leavemeg.gsm) --- When you hear a message, you can leave a message to the sender or another user's voice mail if the user also enabled the voicemail box function.

* return the main menu (vm-starmain.gsm)

Press 0 of mailbox option:

1: to record your unavailable message. (vm-options:gsm) (vm-rec-unv:gsm)

1: accept this recording

2: listen to it

3: re-record it

2: to record your busy message. (vm-options:gsm) (vm-rec-busy:gsm)

1: accept this recording

2: listen to it

3: re-record it

3: to record your name. (vm-options:gsm) (vm-rec-name:gsm)

1: accept this recording

2: listen to it

3: re-record it

4: to record your temporary greeting. (vm-options:gsm) (vm-rec-temp:gsm)

1: accept this recording

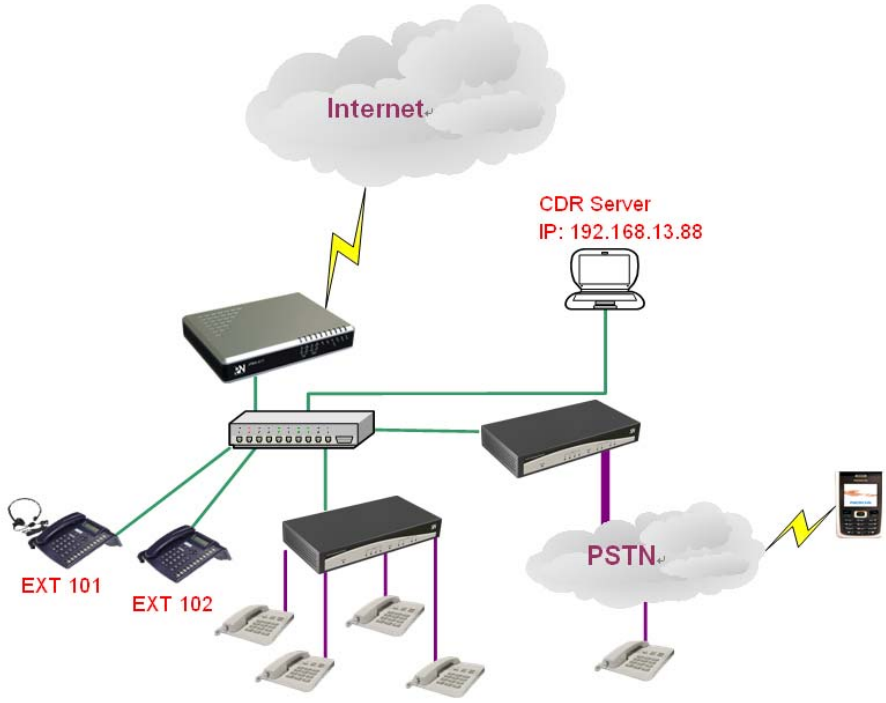
2: listen to it

3: re-record it

＊ : to return to the main menu.

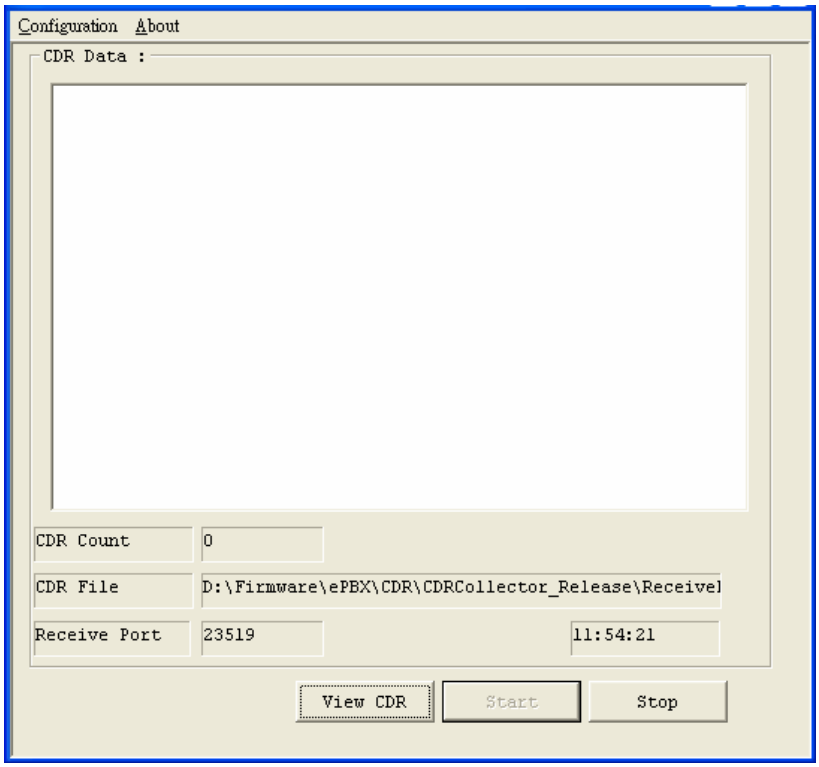
5.4 CDR Concept (RealTime)

IPBX has 2 types for CDR collection, one is RealTime another is Storage. This chapter will introduce you how to use RealTime CDR function.

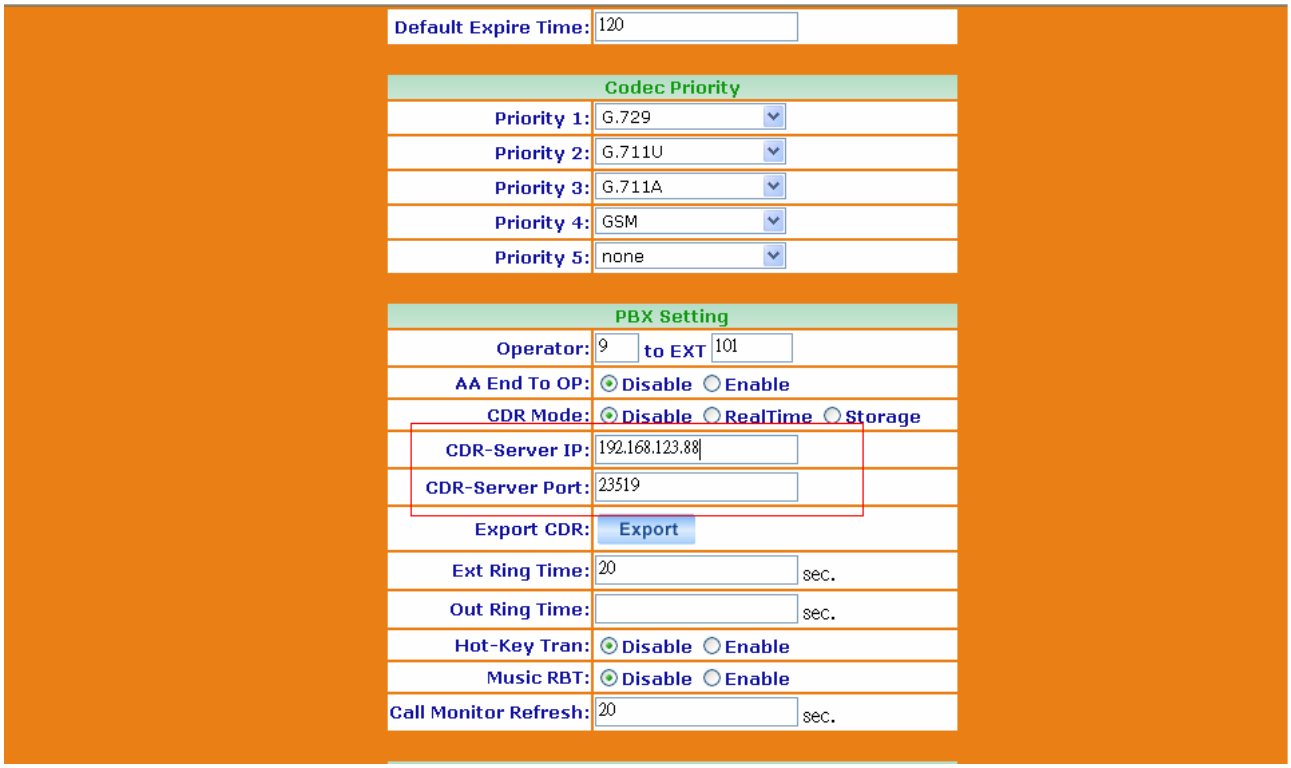


Step 1: Install CDR program to a PC. So the PC will be a CDR collection server.

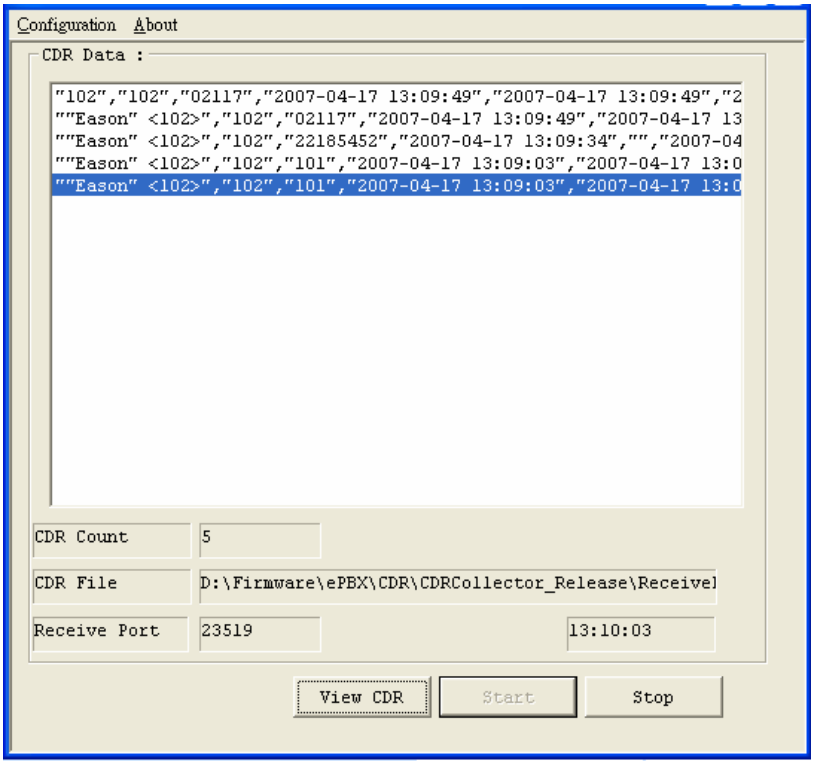
- Go to http://www.pheenet.com to download CDR program and install it to your PC. After installing, press Start for CDR collection.



Step 2: In your IPBX, go to [Configuration→ IP PBX] to set the CDR Mode to RealTime and also set the CDR-Server IP.



Step 3: If IPBX got a call record, it will send a TCP packet to CDR server. Then CDR server will show the CDR log as below.



Step 4: CDR server will collect CDR record for each day as CSV files. That means the CDR server will store many CDR files. Please press Vies CDR go to \CDRCollector_v1xx\ReceiveFile to get the CDR

CSV files. The file name will be looked like [2007-4-17.csv], and you can use Microsoft Excel to open it.

We strongly suggest u STOP CDR Collector if you want to view Today's call record (TodayTemp.csv), otherwise the CDR Collector will lose the new call record due to the CSV file for Today (TodayTemp.csv) is being opened.

- The CDR file will look like below

A1 fx Eason" <102>"

	A	B	C	D	E	F	G	H	I	J
1	Eason" <102>"	102	101	2007/4/17 13:09	2007/4/17 13:09		0	0	ANSWERED	
2										
3	Eason" <102>"	102	101	2007/4/17 13:09	2007/4/17 13:09	2007/4/17 13:09	19	18	ANSWERED	
4										
5	Eason" <102>"	102	22185452	2007/4/17 13:09		2007/4/17 13:09	0	0	FAILED	
6										
7	Eason" <102>"	102	2117	2007/4/17 13:09	2007/4/17 13:09		0	0	ANSWERED	
8										
9	102	102	2117	2007/4/17 13:09	2007/4/17 13:09	2007/4/17 13:09	10	10	ANSWERED	
10										
11	Eason" <102>"	102	101	2007/4/17 13:23	2007/4/17 13:23		0	0	ANSWERED	
12										
13	Eason" <102>"	102	101	2007/4/17 13:23	2007/4/17 13:23	2007/4/17 13:23	3	1	ANSWERED	
14										
15	Eason" <102>"	102	*98	2007/4/17 13:38	2007/4/17 13:38		0	0	ANSWERED	
16										
17	Eason" <102>"	102	*98	2007/4/17 13:38	2007/4/17 13:38	2007/4/17 13:40	72	72	ANSWERED	
18										
19										
20										
21										

The title for each column is:

Caller ID Name, Caller ID,Called ID, Start Time, Answer Time, End Time, Call Duration (seconds), Talk Time (Seconds), State.